The Boston Medical and Surgical Journal

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July 11, 1918

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Original Articles.

EXTREMES IN INFANT FEEDING, THE PRESENT TENDENCIES.*

BY FRITZ B. TALBOT, M.D., BOSTON.

DURING the past ten years there have been three distinct tendencies in the modification of milk for infants, and the following communication comments on these tendencies and their good points and fallacies.

There has been much controversy and criticism of the so-called "Boston Method" of infant feeding,—a method, indeed, which does not exist, unless we take Dr. John Lovett Morse's repeated teaching that "each infant is a law unto himself; that the milk should be modified to suit the infant, and not the infant made to suit the formula." The principles taught, however, are not the principles which are always practiced.

The first principle in infant feeding which my student mind absorbed was that the percentage composition of cow's milk in artificial feeding should be so modified as to resemble, as near as possible, human milk. The set of formulas taught was strictly adhered to, and it seemed heresy to vary even as much as one quarter of one per cent. from the formula given for a certain age. A young baby on being weaned was first started on a formula containing cream, skim milk, lactose and water, given in the following percentages: 2% fat, 5% lactose, and .50% protein. This formula was made progressively stronger, in the following sequence,—2.50, 5.50, .75; 3, 6, 1.00; 4, 7, 1.50, up to the latter, which is supposed to approximate human milk. The lack of knowledge concerning the composition of human milk was responsible for the assumption, in the student mind, at least, that it always contained 4% fat, 7% lactose, and 1.50% protein. Recent studies of the chemical composition of human milk, however, have shown that its strength varies in different women; that the percentage of fat may normally be anywhere from 2 to 6%; the percentage of sugar, which is more constant than that of fat, has been found to be as low as 5%, and as high as 7.8%, while the percentage of protein may vary from 1 to 2%. Despite these variations in the percentage composition of human milk, breast-fed infants, with few exceptions, thrive and develop normally, providing that the quantity received is sufficient to supply the necessary caloric requirements; and there is very little convincing evidence to show that the variations in the percentages of fat, carbohydrate, and protein in breast milk have any marked effect on the well-being of a breast-fed infant.

* Read at meeting of the New England Pediatric Society, March 8, 1918.

A very essential but little-understood factor in breast milk, and one which is not approximated at all in modifications of cow's milk, is the salts.

Artificially-fed infants usually do well at home despite the way the milk is modified, provided that they are protected from external injurious factors, have good hygienic surroundings, and are not over-fed. There is a small number of infants, however, which, either from some inherited weakness in digestion, or because of handicaps, such as prematurity or congenital diseases, thrive only when the milk is modified with the greatest care, from the beginning. There is still another group of infants who have either been improperly fed over a long period of time, or whose digestion has been weakened by illness, who are made to thrive only with the greatest difficulty. These cases of improper feeding could be prevented if the percentages of the formula were properly figured out, the calories estimated, and due regard given to the information obtainable from the stools.

Fat. About ten years ago the commonest fault in infant feeding was over-feeding in fat, either intentionally or by mistake. In the former instance, anxiety to make the baby gain was responsible, and in the latter the fault lay in the neglect to figure up the percentage of fat actually given in the formula, thus failing to recognize the fact that cream might contain as low as 5% or as high as 40% fat. It was very often found that infants with a fat indigestion received much more than 4% fat in their formula. Attention was, therefore, drawn to the rôle of fat in indigestions, and it became the custom to consider that all indigestions during infancy were due to fat. This tendency became more pronounced when stools began to be examined microscopically as well as macroscopically. The use of sudan iii, which stains fat a bright orange red, made the fat in the stools stand out prominently under the microscope. When, therefore, a stool was found microscopically to contain any fat at all, it was assumed that there was too much fat in the food, and the amount was reduced to such a degree that it was impossible to supply enough calories without giving excessive amounts of carbohydrate or protein. This procedure, in many cases, was both unjustifiable and harmful. The fat should be reduced only when the macroscopic and microscopic findings are accompanied by clinical symptoms of indigestion.

The writer, in an earlier paper, laid much emphasis upon the amount of fat in the stools necessary to cause a fat indigestion, but it seems wise now to define exactly what he believes constitutes an indigestion due to fat. A true fat indigestion may be said to exist when the stools resemble scrambled eggs. This is the only type of stool which, without exception, is due to too much fat in the food. There are other types of stools which may or may not represent a fat indigestion, such as "soap stools," and stools containing soft curds. If "soap stools" are present with a normal digestion they are of no significance and cannot be said to represent a fat indigestion. If accompanied by symptoms of indigestion, they may be said to represent a fat indigestion and will disappear when the fat in the food is diminished. In this case, the clinical symptoms, and not the microscopic findings, furnish the final evidence for diminishing the fat in the food. Stools containing soft curds are more commonly seen than either the scrambled egg or "soap stool," and, therefore, have quickly attracted the attention of nurses and physicians, because they are easily recognized. Some years ago the writer showed that they were composed almost entirely of fat, but do not always signify that an infant is suffering from too much fat in the food. In a large proportion of cases, soft curds merely represent an overflow of unused fat from the body, and if no symptoms of indigestion are present, they cannot be considered abnormal. When symptoms of indigestion are present, soft curds, in the great majority of instances, will be found to be due to too much carbohydrate in the food, and not, as is ordinarily supposed, to an excess of fat. The rôle of carbohydrates in the production of fat curds was at first not taken into consideration, and the appearance of soft curds was wrongly interpreted as meaning too much fat in the food in all instances. Fat, therefore, is not as dangerous to an infant as many believe, but, on the other hand, is often necessary for its well-being.

Carbohydrate. After the fat was unnecessarily reduced in the food, as a result of the examination of the stools, large amounts of carbohydrate were then given to supply sufficient calories to make the baby gain in weight. Foods containing large amounts of carbohydrates

were widely advertised by the manufacturers of proprietary foods. Fat indigestions and carbohydrate indigestions became more common. Many babies then gained rapidly when fed on high carbohydrates, but very few physicians stopped to think what was really happening inside the infant. Consequently, so much carbohydrate in the diet satisfied the hunger, and as a result, there was often insufficient protein given to build up muscle. The rapid gains in weight lulled the parents and physicians into a false sense of security. This increase in weight, however, did not represent muscle and bone, but was made up either of fat or water. If the former, the baby became fat and pasty, unable to resist infection, and as a result succumbed easily to disease,—a bad risk, even though it was a big, fat baby. If the latter, the infant made enormous gains in weight, became puffy and oedematous, and on losing the water from the body there resulted an equally rapid loss of weight. One of the earliest symptoms of carbohydrate indigestion is sour watery vomitus, which nearly always means too much sugar in the food. Other important symptoms in the sequence of their appearance are gas, green, spongy stools, and finally watery, green, acid stools which cause scalding on coming in contact with the skin. These stools usually contain soft, fatty curds, which have been wrongly interpreted as evidence of a fat indigestion. How can the fat curds in these stools be explained? Carbohydrates are broken down by the digestive juices into simple sugars (monosaccharides) ready for absorption. When there is too much sugar to be immediately absorbed, the intestinal bacteria decompose the sugar into lactic, acetic, and butyric acids. These acids, when concentrated, are irritants, the intestinal canal gets rid of them as quickly as possible, there is an increased peristalsis, and the food, which under normal circumstances would take eighteen to twenty-four hours to pass through the intestinal canal, goes through in from three to four hours. This, therefore, does not leave time for complete digestion and absorption of any of the food components, and as a result, they are carried out before digestion is complete. So far as the writer's observations go, there is no exception to the rule that burning or scalding stools, which irritate the buttocks, are due to too much sugar in the food. Over-feeding in carbohydrate is just as harmful as over-feeding in fat. The signs of carbohydrate indigestion are easily recognized, and the second swing of the pendulum was a growing tendency to attribute more and more of the indigestions of infants to sugar or starch. As a result, therefore, many physicians then began to give foods low in both carbohydrates and fats. The only food component now left to give in abnormal amounts was protein.

Protein. During the time that increasing amounts of sugar were being given, and smaller amounts of fat, more and more protein was added to the food in order to give the required number of calories. At about the same time the influence of the German schools reached this country, and many practitioners accepted, without qualification, the teachings that protein was harmless. As a result, there was a growing tendency to give, even to the very young infants, larger and larger amounts of protein, by the exclusive use of whole milk or skim milk mixtures. This method of feeding infants was not new, but was practised many years ago by Budin in Paris, and also during a recent summer on the Boston Floating Hospital. In the latter instance, all infants, irrespective of age or condition, were fed on undiluted skim milk. Some apparently did very well, others poorly, and a few became so ill ("intoxication") that they were saved only by the use of human milk. The experience of that summer did not justify the continued use of undiluted skim milk, but recently it has been resurrected, and again come into vogue, especially among trained nurses. The principal evidence against the use of high protein feeding in early life depends upon the observations of Selter, Gellhorn, Holt and Hoobler, who describes an intoxication from too much protein in the food, of which the following symptoms are characteristic: subnormal temperature, slow pulse, superficial respiration, and a bluish-gray color of the skin. The stools are curdy and grayish-yellow, with a cheesy odor. The urine contains a kenotoxine which, when injected into mice, causes a set of symptoms similar to those present in the babies. Exactly what takes place when an infant receives a formula with a high percentage of protein is not certain, but there is undoubtedly a clinical syndrome due to such over-feeding.

High protein feeding is not as economical as that of carbohydrate and fat, and puts additional work on the digestion. If enough extra

water is not given between meals to hold the products of digestion in solution, an added burden is also placed on the excretory organs, especially the kidneys. It has been frequently shown that during the digestion of carbohydrates the metabolism is increased 5.8% by the work of digestion, while fat causes 12.7% increase, and protein a 30% increase. The digestion of protein, therefore, is not as economical as that of carbohydrate and fat. It is necessary to give 130 calories of protein to supply the same amount of usable calories as is obtained from 105 calories of fat or 112 calories of carbohydrate. Although the teachings in the past have laid too much stress on the harmful effect of protein, it has since been shown that greater quantities can be used than was formerly supposed possible, especially when the milk is boiled. Protein, however, may cause symptoms which are dangerous to life, and should not be used indiscriminately.

The object of this communication is not to destroy the present methods of feeding, but merely to draw attention to the extremes and emphasize the importance of feeding a baby according to its physiological powers of digestion. The following rules may be taken as a guide to prevent extremes:

1. A newborn infant needs, roughly, about 60 calories per kilogram of body weight; a three months' old infant from 100 to 200 calories; a six months' old infant from 90 to 100 calories, and a nine months' old infant from 70 to 90 calories.

2. The percentage composition of the food should be adapted to the digestion of the individual infant, but in no instance should more than 4% of fat or 7% of sugar be given. The limits of protein are rather more difficult to define, but, roughly speaking, at least 7% of the food calories should be protein, and infants under four months of age, with rare exceptions, should never receive more than 1.6% protein.

3. The clinical symptoms, plus the gross appearance of the stools, should be guides as to whether the food elements are digested or not. The microscopic examination of the stools in infancy is only of secondary importance in infant feeding, and should be used only to confirm other findings.

4. Finally, due consideration should be given to the balance of the food components, especially of fat and carbohydrate, in relation to protein, and care should be taken that sufficient vitamines, both fat-soluble and water-soluble, are present to insure proper growth.

DISCUSSION.

DR. MORSE: Dr. Talbot has gone back ten years. I can go back twenty-five or thirty years. I remember the days when we were taught by Dr. Rotch that we should attempt to imitate human milk by giving the same mixture to all babies, *i.e.*, 1-2 cream, 1-8 milk, 1-16 limewater, water to 1, and sugar up to 7. We gradually went on and adopted other points of view. For a time everybody thought that with each change the problem of infant feeding was solved. Having seen so many changes in the points of view as to infant feeding, it makes me very much less certain now whether I am right at any given time in my method of feeding babies. It is much more difficult for me to get up and speak about infant feeding now than it used to be. I used to be sure that I was right. Now I am quite certain that what I think is right today will be modified by new discoveries tomorrow. I am not quite so pessimistic as to the microscopic examination of the stools as Dr. Talbot is. I feel that the way that the results of the microscopic examination of the stools are interpreted by a great many men, they would be a great deal better off if the stools had not been looked at at all, because they see something in the stool and act on what they see without using their brains. I think we need to mix a little brains with the solutions of sudan iii and iodine. If we do that, we can get very useful information from the microscopic examination of the stools.

THE MENTALLY DEFECTIVE CRIMINAL.

BY AMOS T. BAKER, M.D., EAST VIEW, N. Y.,

Formerly Director, Psychopathic Laboratory, Police Department, New York City; Consultant, Department of Clinics, Westchester County Reformatory, East View, N. Y.

ONE of the fields which in recent years has been entered by psychiatrists—a field abounding in possibilities for scientific investigation—is that of the study of the criminal. In a field heretofore neglected by medical men, methods of investigation of a more or less experimental nature had to be adopted; some have been discarded, others have been retained.

The problems brought to light likewise are many, and in many cases quite different from those met with in other psychiatrical branches. One meets with individuals of a more or less abnormal make-up for whom there is no descriptive designation available. In the future these cases may provide psychiatrists with material which may prove helpful in the solution of other problems.

Something so far has been accomplished yet still more remains to be done before a scientific understanding of the whole problem can be presented and a classification of the clinical material made on a medical basis.

Among criminals cases are seen which for years have been subjects of study and treatment in the established domains of mental and general medicine. I refer particularly to the insane and the mentally defective. For the care and treatment of the so-called criminal insane special provision has been made in many states in this country, and also in other countries; on the other hand, the treatment of the mentally defective criminal, as such, is practically unknown. The reasons which led to the establishment of separate institutions for the criminal insane, it seems to me, apply as well to the mentally deficient criminal; in fact, many of the latter class from time to time, for lack of a more suitable place, are sent to the hospitals for the criminal insane. Many of them are not equal to the demands made upon them in the reformatories and prisons and should be given the benefit of care, treatment and training in a proper institution.

The Police Department of New York City in November, 1916, for a second time, established a psychopathic laboratory for the study of individuals arrested for crime. Under the plan of re-organization as outlined by the executive committee composed of Dr. Thomas W. Salmon, Medical Director of the National Committee for Mental Hygiene, Dr. Menas S. Gregory, Director of the Psychopathic Ward at Bellevue Hospital and Dr. George H. Kirby, director of Clinical Psychiatry at the Manhattan State Hospital, Ward's Island, groups of more or less accessible persons were selected for scientific investigation.

The laboratory was installed at police headquarters. All adult prisoners accused of felonies brought to police headquarters, and all adult prisoners arrested in a nearby inspection district were designated for intensive study. As many as possible of these individuals were seen and interviewed. For the period of eleven months from December 1, 1916, to November 1, 1917, about eight thousand persons were seen and interviewed by the laboratory staff.

It is obvious that with a small staff it was utterly impossible to give each of these eight thousand individuals a satisfactory examination; in fact, owing to the necessities of court procedure, as well as for other reasons, a prolonged examination of all would not have been possible or desirable even had the laboratory the necessary equipment.

In consequence those who, from their manner or appearance or from the nature of the crime committed, seemed to be abnormal, were, where circumstances permitted, selected for examination. 823 individuals were selected and were given a more or less prolonged examination; of the 823 so selected and examined 16% were found to be mentally defective. In many of these cases a complete mental, physical and psychological examination was made.

The laboratory has a record of 119 cases of mental defects in which a court disposition was made; sixty cases, or approximately fifty per cent., were released from custody by the courts, and the other fifty per cent. were sent to one or another penal institution.

The group of sixty cases released by the courts is the one now selected for presentation. All of this group were more or less noticeable from their general appearance of inferiority; many looked stupid and unintelligent; many of them presented one or more stigmata of degeneration; some were not able to give satisfactory answers to questions regarding their past lives; often painstaking cross-examination was required in order to induce them to recall matters about which there should have been no hesitation.

Of this group 52 were males and 8 females; 44 were single; 12 were married and 3 were widowed. In one case the civil condition was not ascertained. Of the 8 females 3 were prostitutes, and in the cases of two others their crimes resulted from sexual irregularities. Two were decidedly alcoholic and the remaining one was a confirmed thief.

The crimes committed by this group are shown in the following table:

Abduction	1
Assault and attempted robbery	2
Assault and grand larceny	1
Attempted burglary	1
Attempted felonious assault	1
Attempted rape	1
Attempted robbery	1
Bribery	1
Burglary	14
Concealed weapons	1
Felonious assault	7
Grand larceny	12
Kidnapping	1
Perjury	1
Petit larceny	1
Receiving stolen goods	1
Robbery	8
Sodomy	2
Unlawful entry	2
Vagrancy	1

Reference to the foregoing table shows that forty-three or 72% of these cases were charged with crimes of an acquisitive nature. This fact is important to bear in mind in connection with the economic progress of the members of this group.

In referring to the table of the ages the mode is found to be sixteen years and the median age twenty-one; over fifty per cent. were of twenty-one years or under. The table of chronological ages is here given in full:

16 years	8
17 "	6
18 "	3
19 "	6
20 "	4
21 "	6
22 "	2
23 "	1
24 "	5
25 "	1
26 "	3
27 "	2
28 "	2
29 "	1
30 "	1
31 "	4
32 "	1
34 "	1
36 "	1
37 "	1
51 "	1

The school records are very significant; almost invariably there was a history of poor progress at school; the ability of this group to study and to apply themselves to the daily school tasks proved irksome and difficult; truancy was not infrequent. In most cases work had to be repeated and promotion was slow, and after a certain grade well nigh impossible.

The school record as given by each subject shows the degree of education attained to be as follows:

None	15
Read and write	10
3rd grade	2
4th grade	4
5th "	14
6th "	3
7th "	8
8th "	2

After an acquaintance with the chronological ages and the school record it is interesting to note the mental ages of this group, reference to which reveals the following:

12 were imbeciles
2 had mental ages of 7 years
4 had mental ages of 8 years
14 were rated as having mental ages of 9 years
13 had mental ages of 10 years
2 had mental ages of 11 years
9 had mental ages of 12 years
4 were classified as subnormal

The work done by this group was all of an inferior nature; only seven males out of a total of fifty-two remained employed in one position for over a year; it is interesting to note that these held their jobs for four years or more; two of them worked as useful men for physicians; one worked in a small laundry; one was a laborer with pick and shovel; one worked in a small tailoring shop pressing clothes; one was employed by a firm to carry about samples for salesmen; one worked for a large manufacturing concern. It would seem that in the cases of six of these seven that their positions were such that they did not have to compete with others, and also that they were closely under the supervision and direction of their employers. In the case of the other forty-five males it was found that they held their positions for comparatively short periods; they were out of work for longer or shorter intervals, depending upon their good fortune in securing employment. Their histories show that they left jobs for various reasons; some were not able to get an advance in pay; others found certain features of their work distasteful; others simply got tired of working; others were discharged for reporting late for duty or for becoming involved in controversies or fights with fellow employes or those in authority over them.

Of the sixty cases, thirty-three, or over 50% of them had previous criminal records; 15 had been arrested once before; 13 had been arrested twice before; one was arrested three times previously; one had been under arrest four times previously and three had been under arrest previously as many as five times.

Over fifty per cent. were accustomed to indulge in alcoholic liquors.

It would be interesting to know what expense

the community has been put to by this group.

In addition to making an examination of each member of this group the laboratory instituted an investigation of the history of each case after discharge by the courts. It was learned that since their discharge by the court 19 have been leading more or less anti-social lives; 9 have been arrested once subsequently; 4 have been arrested twice subsequently and 1 was arrested five times subsequently; the remaining five are not working and are associating with known bad characters; 14 have been in and out of employment; 12 are working with satisfactory steadiness and are self-supporting; 15 have disappeared.

A study of this group, together with the other which the law had deemed wise to confine for a time in some penal institution, raises the question, is society dealing with these individuals in a suitable manner? These individuals are poorly endowed from birth; all through life they are found lagging behind their normal associates; in school their progress is slow and discouraging; when called upon to compete with others in the struggle for existence they are not equal to the task. To compensate for this lack they revert to a more primitive method of acquiring a livelihood; hence their anti-social behavior, for what they cannot acquire legitimately by reason of their inferior endowment they take by force.

To equip these individuals so that they may have a better chance to compete with others will require time and patient training; many of them would be greatly benefited if the proper attention was given them.

It seems to me that there is great need for an institution to which these mentally defective delinquents could be sent where they could be cared for and trained as their condition demanded.

If these individuals could be segregated early in life, before criminal habits become established, the possibility of obtaining results would be greater. In time to come this may be possible; at the present time they present a problem which demands a solution, both for the benefit of the individual and the community. Of what value is it to the individual or the community, on the one hand, to send these individuals to prison where contact with older and hardened criminals may firmly establish anti-social habits or, on the other hand, to release them outright not any better prepared than they were before, and encouraged to some degree by not receiving the punishment expected, to continue in most cases an anti-social career?

TREATMENT OF COLDS.

By D. C. Dennett, M.D., Winchester, Mass.

A cold is an abscess with many openings and diverticula. The treatment is sterilization and drainage. It is the most important disease of this climate. It causes the greatest economic loss.

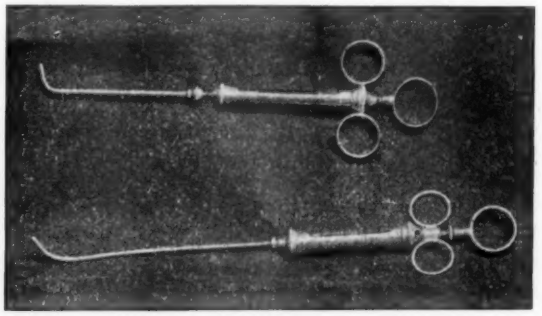
The purpose of this paper is to call attention to the treatment of colds and to review certain facts which must be borne in mind if colds are to be treated successfully. Never mind the germs to blame for the pathological process, but carry on against all germs and do it early. A cold is purely local at first and exists, without subjective symptoms, on some part of the mucous membrane of the upper air passages, the lachrymal passages or the conjunctival sac. Before the patient senses any disease there may be objective symptoms. There will be no subjective symptoms until the toxin formed by the germs passes through the epithelial layer of the mucous membrane into the blood stream. When there develops a sense of delicious drowsiness, followed by a little stiffness, a little ache in a bone or muscle, or pain in head or spine, cold feet, a little chilliness, a little sore throat, and then a little fever, the cold has entered the blood stream and the disease has become constitutional. Prior to these symptoms an examination of the throat would have shown impending trouble, and the treatment at that time either would have aborted the attack or greatly lessened its virulence. Inexplicable drowsiness and fatigue are often the first symptoms of a cold. The enemy has passed the "far flung battle line" and the germ narcotic in the blood stream has reached the brain. All of the above symptoms may be present, or one or more may be absent. High fever, severe pain, chills and icy feet may be, and not infrequently are, caused by poisonous absorption from some area in the upper membranes, without any soreness of the throat whatever. And on the other hand, the throat may be very sore without the other constitutional symptoms. The individual resist-

ance may be so strong, the epithelial layer such a barrier, that the germs and toxins cannot pass beyond the spot where they are lodged. It is, then, a localized cold. The individual, without suffering harm himself, is a menace to others. He is a cold-carrier. The white blood corpuscles and the epithelial cells battle against the germs. Treatment should begin where the battle is raging. We should go to the assistance of the natural forces.

To rely on remedies administered internally without local treatment is like trying to purify the river down stream and doing nothing to prevent the known pollution of the headwaters. It is unscientific, to say the least. If we destroy the pollution at its source it is often unnecessary to use any other remedies. A membrane constantly infected with virulent germs to a greater degree than normal is often the first stage in pneumonia, tuberculosis, bronchitis, arthritis and some other diseases. This cannot be too strongly emphasized. The first stage of pneumonia is a subacute or more or less chronic pneumococcic, streptococcic, staphylococcic infection of the mucous membranes above the larynx. Don't forget that. If the upper membranes were more carefully treated there would be less pneumonia. If we always bear in mind that a cold is an infectious and contagious disease, furnishing the physician in this locality the bulk of his work, causing an enormous economic loss, acting as the exciting cause of many other more serious diseases, besides causing great suffering, we shall treat it with greater care.

Let us consider first the treatment of a "head cold" as distinguished from what the patient calls a "bronchial cold" or "cold on the chest" (bronchitis) and cold with "loss of voice" (laryngitis). Begin by treating the conjunctival sac. Some colds start there and work down. Evert the lids to see what is there. Inspect the nose, the post-nasal space, pharynx and fauces. The most important place to treat is a triangular area, the apex of which is on the posterior pharyngeal wall opposite the tip of the uvula, the base up, with the two upper angles marked by the openings of the Eustachian tubes. This I call the "triangle of fire." It is the sorest spot in most colds. Treatment of this area causes the most smarting. The virulence of the cold is frequently measured by the degree of burning and smarting caused by the treatment of this area. The patient may not know this part of the pharynx is so sensitive until it is treated. Then he will exclaim, "It smarts like fire," whereas he has made no complaint of the same treatment of the other areas.

Apply to the everted lids a 50% solution of silver vitellin. Too weak solutions are practically worthless. The solution is so rapidly diluted with tears that a 50% solution is reduced to 5% strength in a fraction of a minute. In three or four minutes, after putting one drop in each eye, direct the patient to open his mouth and the silver will be seen running down the posterior pharyngeal wall. This shows where the tears go. Any infection of the conjunctiva that is not destroyed by the tears may pass through the lachrymal canals to the triangle of fire. Hence the importance of treating the conjunctival sac in colds. It may prevent the reinfection of the throat. Always treat the post-nasal space with a syringe. Do not use a post-nasal applicator. A thorough treatment cannot be given with it; it gags more and is more painful. After applying the silver to the pharynx with the syringe, direct the patient to hold his head down for a moment, and as soon as the medicine appears in the nostrils the head should be held up and back and the silver snuffed up. Warn the patient not to blow his nose after the treatment for at least an hour, and not to dislodge the silver-impregnated mucus in the post-nasal space. He may spit out what runs into the mouth, but no more. If this treatment is properly given at bedtime the silver will remain in the nose and throat all night, ensuring a long contact with the germ-infected membranes. The technic and thoroughness of the treatment determine its efficacy. This applies to the use of most remedies. The value of an opinion concerning the efficacy



The upper syringe is a good one. The lower one is spoiled by the curve in the tip. The right-angle bend in the tip is the proper one.

of a drug depends upon whether that opinion is based upon the faithful use of that remedy by a competent person. A drug may be used with great success by one physician, and as used by another it will do more harm than good.

Success in the battle against disease depends as much upon the man behind the remedy as success in war depends upon the man behind the gun. Sulphate of atropin and aconite are the great internal remedies for the "head cold"; opium and ipecac (Dover's powder) for "bronchial colds." These drugs are very effective if given at the right time. If the silver causes much irritation of the conjunctiva put a little White's ointment in each eye. This is a useful routine practice with patients who have sensitive membranes. The local home treatment consists in putting one drop of 25% solution of silver in each eye every three hours, and two drops in each nostril. When the drops are put in the nose the patient should

The proper home method of giving a post-nasal through the nostrils. Head extended to the limit, medication with a medicine dropper.

lie flat on his back with his head well over the edge of the bed and so far extended that the drops will run up to the ethmoid region and back to the pharyngeal wall. Then, turning the head slowly from one side to the other, a very good local treatment is given. The post-nasal treatment given by the physician should be done in a way not to gag, frighten, or hurt the patient. This can be done if one knows how. With the mouth wide open, the patient should breathe with quick, short breaths, like a dog panting. If he holds his breath he will probably gag. The eyes should be kept open and he should look calmly at some distant object. If he closes his eyes the chances are he will retch. He should not hold tightly to the sides of his chair, make himself rigid, or clinch his hands. He should be instructed to relax and rest and not to look for trouble. The treatment should be given quickly and deftly. To do this, proper instruments are necessary.

The upper tongue depressor is the better one. The smooth, downward tip on the lower one causes it to slip back over the base of the tongue and unnecessarily gag the patient.

Some tongue depressors gag more than others, some syringes are hard to use. It is important to keep the feet warm during a cold. If the patient is up he should wear warm stockings, if in bed a hot water-bottle should be placed at his feet. As a rule the patient does not do well if his feet are cold.

If one member of a family has a cold the others should be examined for symptoms. One or two treatments will act as a prophylactic or will abort or modify a cold if it has just started. If there is a chronic, septic focus polluting the blood stream and lowering the body vigor and resistance, it should be removed at the proper time. A pus sac at the root of a tooth, a purulent pocket in tonsil or sinus may be the cause of lowered vitality that predisposes to recurrent colds. Rest is the greatest resistance promoter. Forty-eight hours in bed during a cold may prevent pneumonia. This is especially true in the aged and the weak. The germs are on the mucous membrane, waiting for the natural barriers to break down under the strain of fatigue and exposure that they may overcome the resistance of the victim. Pneumonia is the penalty for neglected treat-

ment of a cold when one is overworked or weary from any excess. The claim that "sickness is an error" comes nearer the truth than some of us are aware.

A "cold" patient should be directed always to cough and sneeze into his handkerchief. The handkerchief should effectually muffle the sound of a cough. There is no excuse for disturbing a church service or other public meeting by coughing. Spraying a cold, as done by the average patient, does more harm than good. Gargling is harmless, and may do good by dislodging post-nasal mucus that interferes with ventilation and drainage through the Eustachian tubes. A blood-warm, alkaline nasal douche, given with the Birmingham device, does good if there are dust and dirt in the nose and throat. This should be followed by oil vapor, and this by 25% sol. of silvol or argyrol. In children too young to expectorate, castor oil should be given to remove from the digestive tract the swallowed muco-purulent secretions. Hexamethylenamine with acid phosphate of sodium may be used with a liberal amount of water.

In military camps the soldiers should be ordered to report the first symptoms of a cold, and prompt treatment should be given. This is as important as reporting the first symptoms of specific urethritis. Acute infection of the pharyngeal mucous membrane may be treated as successfully as acute urethritis. During cold epidemics prophylactic nose and throat treatments should be given. Routine nose and throat inspection should be made at such a time. Before going aboard ship, all should be examined for infected mucous membranes. Careful, thorough, and repeated treatment will lessen the number of camp colds and pneumonia. To what extent colds may be spread through the dish pan is a question. Dishes are not sterilized as a rule, and if one member of the family or a guest dining with us has a severe cold his dishes may infect all the others in passing through the dish water, or the same dishes may be used by another person at the next meal. All dishes should be sterilized by boiling. There is still need of impressing people with the fact that colds are contagious and that they should try not to infect others. Do not "go a visiting" if you have a bad cold, and "keep away from bridge parties and public meetings" is a wise injunction.

SUMMARY.

This is a plea for the early, careful treatment of "colds."

A cold is a localized disease at first and may be treated as successfully in the first twenty-four hours as a specific urethritis in the same stage.

In military camps orders should require colds to be reported when the first symptoms appear.

Proper local treatment is very important.

The most important area to treat is "the triangle of fire."

A cold may remain localized for weeks with no subjective symptoms. This is the case with the cold-carrier.

Treat the eye first with a strong solution.

Keep a tube of White's ointment handy for use in the eye if it smarts after treatment with 50% argyrol solution.

Give the patient 25% solution for use in the eyes and nose.

Do not poke a cold with medicated cotton on a stick.

Do not spray a cold.

Do not give aspirin except for pain, and do not give quinine and whiskey.

Treat a cold seriously because it is a serious disease.

A cold, acute or chronic, is the first stage of pneumonia, pulmonary tuberculosis, many cases of so-called rheumatic fever, and other serious diseases; that is to say, the germs of these diseases first existed on the upper mucous membranes, and the best prophylactic for these diseases is sterilization of those membranes to the greatest extent possible, plus rest and hygienic environment.

It is against the law of good form to cut out your muffler when you sneeze or cough.

Give sulphate of atropine and aconite in the first stage of "head colds," steam and oil inhalations and warm air for "loss of voice colds," Dover's powder early for "cold on the chest."

This paper is based on the treatment of over two thousand cases with 25% to 50% solutions of silvol and argyrol applied locally, combined with certain internal medication, which was varied to suit the case. If used at the right time the local treatment is best and most effective.

Society Reports.

NEW ENGLAND PEDIATRIC SOCIETY.

The fifty-second meeting of the New England Pediatric Society was held at the Boston Medical Library on March 8, 1918, at 8.15 p.m.

Dr. E. P. Stickney of Boston, in the chair.

The following papers were read:

1. Pyloric Stenosis, W. E. Ladd, M.D., Boston.*

2. Studies of Infant Feeding, X, the Digestion and Absorption of Fats, A. W. Bosworth, H. I. Bowditch, M.D., Boston, Louise A. Giblin, from the Boston Floating Hospital Laboratories.

3. Extremes in Infant Feeding, the Present Tendencies, Fritz B. Talbot, M.D., Boston.†

4. An Original Scheme for Demonstrating Infant Stools, J. I. Grover, M.D., Boston.‡

Dr. Morse (Dr. Bowditch's paper): I think we are all of us much interested in the results of the work by Dr. Bowditch and Mr. Bosworth in bringing the question of the salts before us in such a practical way.

Dr. George D. Cutler (Dr. W. E. Ladd's paper): I am very much surprised to be called upon to discuss this paper because my experience with this operation has been so limited.

During the past eight years I have had the opportunity of seeing many operations for the relief of pyloric stenosis. As I remember it, the operation of posterior gastro-enterostomy in infants consumed at least seventeen minutes. I am much impressed with the safety and ease of pylorotomy and I agree with Dr. Ladd that this is the operation of choice. There is practically no hemorrhage and it may be performed very quickly. It seems to me, as the mucosa is not opened at all, that the possibility of resuming feeding so soon after operation is a decided advantage.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting of Wednesday, May 1, 1918, 8 p.m.

Dr. Thomas R. Neilsen, Acting-President, in the chair.

* See Journal, Vol. clxxviii, p. 767.
† See Journal, Vol. clxxix, p. 35.
‡ Published in the Transactions of the Association of American Teachers of the Diseases of Children, 1917.

REPORT OF A CASE IN WHICH THE PATIENT SURVIVED THE REMOVAL OF A LARGE TUMOR OF THE BRAIN FOR OVER THIRTY YEARS.

By Drs. W. W. Keen and A. G. Ellis.

Dr. Keen: The case was my very first modern brain case; it shows our then technic, being one of the earliest operations on such tumors and following by only two years Godlee's in 1885. The patient, a man aged 26 years, consulted me in May, 1887. When three years of age he had fallen out of a window, striking his head. The skull on the left side was indented and operation disclosed detachment of a small fragment of bone from the inner table without fracture of the outer. Twenty-one years after the fall violent epileptic attacks ensued, followed by intense pain in the head. By the end of April the right arm, leg, and face had become paralyzed, and by August of the same year he had become totally blind; there was, however, some intermittence of vision. When I first saw him, on May 30, 1887, there was some improvement in the paralysis. After an interval of several months, during which time a course of KI was continued, operation was done on December 15, 1887. Removal of the first button exposed the tumor, but it was larger than the opening. A second button was removed, and the opening was further enlarged, until it measured 3 x 2½ inches. The upper margin was ¾ inch from the midline. The tumor dipped behind the squamous portion of the temporal bone for half an inch. The dura was adherent to the brain, except at the margin of this large opening. I incised the dura one-quarter of an inch from the margin of the opening in the bone, and with my little finger, to my surprise and relief, enucleated the tumor with as little difficulty as one scoops an egg out of its shell. Hemorrhage was free but not alarming. The tumor was practically a foreign body, starting at the dura as a result of the constant irritation from the little loose fragment of the inner table broken off at the time of the accident and never consolidated with the skull. Every inspiration, and especially every impulse from the throbbing heart, produced slight movement of this fragment. The tumor weighed 3 ozs. 49 gr., and proved to be a pure fibroma. Eight days after the operation, the floor of the cavity, which was also the roof of the ventricle, evidently gave way, thus opening

the roof of the lateral ventricle, and until the 5th week the cerebrospinal fluid continued to escape very freely. At the conclusion of the operation, two drainage tubes had been inserted and an abundant gauze dressing applied. The bone could not be replaced as the dura was gone. On the 14th day, a moderate hernia cerebri, crescenteric in shape, had appeared, and from two small pin-holes at its middle, clear fluid, evidently cerebrospinal, continued to escape until the end of the fifth week. By the 71st day, the hernia cerebri had subsided until it was nearly on a level with the skull. On the 75th day this elevation had changed to a deep hollow 5.5 cm. in depth. Twenty-one years after the operation this depression was still present. A striking phenomenon was that whenever he sat upright, any muscular effort, and a change of posture, *e.g.*, leaning forward, caused this hollow to bulge about an inch beyond the level of the skull. To protect the brain against injury I bent a piece of tin to fit the surface of his head, covered it with black silk, and sewed this to the inside of a skull-cap which he always wore. Only three cerebral fibromata appear in Bernhard and Hale White's table of 580 intracranial tumors. I gave an "entirely favorable prognosis" at the time of operation, and thirty years have fully justified it. The patient died on January 29, 1918, and Dr. M. L. Davis of Lancaster, who had referred the patient to me, at once advised me, and Dr. Aller G. Ellis procured the brain, which the patient had promised to me many years before.

DR. CHARLES K. MILLS: I was present at this operation by Dr. Keen, which was the second one I had seen. The first was by Dr. Weir of New York, in a patient of Dr. Seguin. The long duration of life in Dr. Keen's case, with the comparatively good health of the patient, is of much interest. There are cases of fibromata which last for a long time, and in which the growth is not discovered until after death. Such a case was reported in Edinburgh in a well-known physician in which was discovered in a latent region of the brain a flat, hard fibromatous tumor. The appearance and disappearance of the hernia cerebri, because of differences in the position of the patient, is of extreme interest. With the patient in the recumbent position, the cerebrospinal fluid found its way, perhaps through the foramen of Magendie, to the spaces around the spinal cord, and also perhaps into the extraventricular cerebral spaces. It probably flowed back to its original position when the hernia cerebri was visible. The small amount of paralysis present in the later stage of the case is probably explained by the occurrence of a very gradual compression of the cortex and subcortex, allowing a sort of functional adjustment. This has happened in long-standing hydrocephalus, and is a more likely explanation than that of compensation by other hemispheres of the brain.

TUBERCULOSIS IN THE ARMY.

COLONEL GEORGE E. BUSHNELL, U.S. Army, Retired: In examination of men for the Army the welfare of the Army is the first consideration. The examination should be made rapidly, with the idea of excluding manifest tuberculosis, of getting the affected men out quickly and filling their places without delay. The idea of speed was extremely foreign to most examiners. The work was standardized in the Surgeon-General's office and a minimum of 50 examinations per day was one of the directions. The belief held by most of the examiners, that it was better to wait until the cases were referred by the regimental surgeons, would delay the matter too long and would, in addition, create the presumption that the disease had been contracted while in the Service and was, therefore, pensionable. The plan tended to prevent too much weight being given to signs of slight organic change. If those believing any evidence of an old healed obsolete tuberculous lesion to be sufficient cause for rejection were afforded time for minute examination, many men perfectly fit to serve would be rejected, with injurious results to the Army. As a rule, a man who enters the military service with a not too large quiescent pulmonary lesion, improved in the long run in army life. It was directed that all cases of active tuberculosis should be rejected, also those with inactive lesions of any considerable size. Quiescent lesions above the clavicle were not regarded as of sufficient size to cause rejection. A further provision was that the diagnosis must be based upon positive signs. Many examiners wished to label some of the cases arrested tuberculosis, retain the men in service, and have them frequently examined. Such a man, however, would be spoiled as a soldier, although he may be the very best

physical specimen we have. Again, if labeled tuberculous from the beginning, the man is barred from being pensioned, which I consider an injustice. Two schools are represented in the diagnosis of tuberculosis: the first is the old school, which does not make the diagnosis until the signs are clearly marked. The other group, perhaps, should not be called a school because it is composed of a number of individuals who do not agree with one another. Recent official word from the French Secretary of War states that of the 86,000 men said to have tuberculosis in the first year of the war less than 50% were found upon reëxamination to have pulmonary tuberculosis. It is believed by some French authorities that 20% more truly represents this group. If, however, it were 50%, it would still mean that the transcedental diagnostician is wrong, that you cannot safely diagnosticate tuberculosis until you have definite signs. I consider this a vindication of what you might call the old school. While much has been said of the danger of infection of one adult by another, a study of the cases in the French army showed that the men who had broken down had brought the disease with them. The experience with the repatriated French civilians reported by Dr. Miller is a striking illustration of the fact that even semi-starvation and hardships of all kinds do not lead necessarily to the development of tuberculosis on a large scale. In the care of the tuberculous soldier, the Government has provided seven institutions for the treatment of the disease. The number of men who will remain under treatment will depend upon the matter of their compensation.

DR. JAMES ALEXANDER MILLER read a paper on "The Tuberculosis Situation in France."

DR. M. HOWARD RUSSELL: In the beginning of our work at Fort Niagara, Dr. Riesman and I thought it would be impossible to examine fifty men a day, but later found it could be easily done.

DR. THOMAS MCCRAE: Having had the experience of handling the men from the front in a base hospital, I believe it perfectly absurd to hold the view that a man who has had tuberculosis is probably going to be benefited by going to the front; this, when you consider the tremendous strain of being in the trenches, the loss of sleep, the crowding together in small areas, nearly all the men with some bronchitis. Would any of us who had had tuberculosis and who are now in health consider living such a life? Why should we say that probably the soldiers will be benefited by it? Not only in the front-line trenches does this apply. It was very significant in my work, particularly with the Canadian soldiers, to find in the labor battalions, where the men were living under healthful conditions, the large number who came in with tuberculosis. Of these, probably the vast majority had the disease before. None of us know how many cases of tuberculosis in adults are instances of fresh infection and how many are the lighting up of old lesions. The examiner who passes a man with the signs of old tuberculosis is sowing the wind, and the medical officer abroad is the chap who will reap the whirlwind. From seeing the work "at the other end of the funnel," I believe we cannot be too rigid, for the sake of the Service and for the man, in the matter of our examinations for tuberculosis.

DR. JUDSON DALAND: Dr. Miller's observations clearly show that rural tuberculosis in France is no more common than here, and that the center of this disease is chiefly in Paris and in those cities possessing a large industrial population. This is also true of this country. It is most gratifying to know that the apprehensions felt by many thoughtful men of the probability of tubercular infection of our troops are baseless.

DR. D. J. MCCARTHY: In presenting to the College a short time ago a review of conditions in the Russian Army, I gave figures of the rejections for tuberculosis in the recruits in the Army for ten years, with the resultant relatively low tuberculosis percentage in the army. This percentage was lower than that in civil life. Little dependence can be placed upon statistics of repatriated prisoners from Germany and Austria in estimation of the total number of cases, because only the ill are returned.

DR. CHARLES J. HATFIELD: I should like to bear testimony to the fact that Col. Bushnell, besides being very enthusiastic, is also very patient, because he receives many suggestions from people interested in tuberculosis. Dr. McCrae gave expression to a feeling held by many of the examiners, relative to the difficulty of obtaining any standard by which a tuberculosis once diganosed can be legitimately included in the Army. I would like to ask Colonel Bushnell in this connection,—how can

an examiner, where the signs of tuberculosis have been demonstrated, certify on paper that the man is sound,—that there is no tuberculosis? I understand that if the tuberculosis is actually recorded, such record will follow the man, will be known to his superior officer, and that it will have an effect upon his compensation later. Colonel Bushnell's experience in military service has given him a basis for his opinion of improvement under working conditions, and his opinion is to be highly considered. In connection with the National Association it has been my privilege to see how splendidly the Surgeon-General's Office has considered the question of tuberculosis in the Army and to note its coöperation with outside agencies wishing to have certain conditions fulfilled. I believe that our Army today, with the various measures enforced by the Surgeon-General, is in a splendid condition.

COLONEL BUSHNELL, closing: The difficulty in understanding how a man who has once had signs of tuberculosis can ever be regarded as a safe man depends entirely upon what is meant by tuberculosis, how much tuberculosis there has been, how many bacilli have been present. In my opinion there is hardly a man who, if looked at closely and studied with the x-ray, would not show some little signs of abnormality somewhere in the lung. I believe that some examiners could find that 90% of those present this evening have what some would call evidences of healed tuberculosis. Many come to me with the diagnosis of active tuberculosis in whom we can find no signs at all. In others, giving a diagnosis of healed tuberculosis we find signs varying from a misinterpretation of the normal signs in the right apex to a slight degree of evidence of old trouble. I am increasingly impressed with the fact that many perfectly healthy people show slight evidences of organic change in the apices of the lungs. It is one of the most difficult things in medicine to draw the line of demarcation between that which is normal and that which is abnormal in the apices, and to decide how large a healed lesion may be safely accepted for military service. Now, after three years, it is found that in the French Army probably two whole divisions sent home did not have tuberculosis. In our own Army, of 80 men sent back in one lot, only 25 were found by Dr. Webb to have signs of tuberculosis. Those coming over and being sent back cost the Government $5000 apiece. A local and temporary condition was called tuberculosis. The same thing is seen throughout the camps. We do not get together better on this subject because the pathologist and hospital physician see only the bad cases, while we see also the good cases.

Book Reviews.

General Principles of Therapeutics. By FRANCIS H. MCCRUDDEN, S.B., M.D., Director of Laboratories, Robert B. Brigham Hospital, Boston; assistant professor of applied Therapeutics, Tufts Medical School, Boston: Gregory, 1917.

This book fills a long felt want of those who have attempted to give instructions in the general principles of therapeutics, that of an elementary text-book. There are reference books dealing with the details of therapeutics; but there is no book which establishes a point of view regarding the many and confusing details of treatment such that these details may be contemplated, not as a vast number of empirical and unrelated elements, but as mutually dependent parts of a whole; a book that treats therapeutics as a science, as a branch of applied physiology. The present volume is intended as a start in this direction, and may be used most effectively to supplement a practical clinical course in therapeutics. The book outlines most clearly the best methods of treatment of diseases of the heart, the kidneys, the vessels, respiration, the blood, the gastro-intestinal tract, the general metabolism, and other chronic diseases.

Food For The Sick. By SOLOMON STROUSE, M.D., and MAUDE PERRY, A.B. Philadelphia and London: W. B. Saunders Co., 1917.

This book is both scientific and practical, and is written from the point of view of both the physician and the patient. It contains many valuable diets which may be used by the patient at home if he understands his condition and the treatment prescribed. Food is explained as the means of furnishing heat and energy to the body, and of repairing waste and building tissue. Food is classified into different elements, and charts giving the average composition of common American food products are furnished. The various factors which influence body needs are enumerated, and include: the activity of the individual, the kind

of work and environment, mental work, age and sex, climate and season, weight and build, and personal peculiarities. Menus for normal individuals and for the sick are suggested.

Various diets are discussed with reference to diseases, including: diabetes mellitus, gout, diseases of the kidney, the heart, stomach, liver, respiratory system, and diseases of the skin. Diets are also suggested for treatment of fevers, obesity, anemia, scurvy, and goitre.

A Treatise On Regional Surgery. By various authors, Edited by JOHN FAIRBAIRN BINNIE, A.M., C.M., F.A.C.S., Kansas City, Missouri, vol. III, with 521 illustrations. Philadelphia: P. Blakiston's Son & Co., 1918.

The third and final volume of Binnie's treatise is a book of eight hundred pages, a little larger than the other volumes, and covering all surgical lesions of the extremities. It seems to the reviewer to be the best of the three volumes.

Drs. Lilienthal and Gerster contribute an excellent monograph on modern thoracic surgery, condensed into one hundred pages, the best that has thus far appeared. Dean Lewis writes most satisfactorily upon diseases of the upper, and Dr. Stanley Stillman upon those of the lower extremities. Dr. Lane submits a characteristic chapter on fractures in which the personal pronoun is used almost as frequently as the Lane plate is recommended—and that is continuous: he advises a plate and screws for fracture of the patella, without mentioning suture of the lateral expansions of the torn tendon; certainly inadequate treatment.

The book is profusely illustrated; and the short system now completed is worthy of study by all students and young surgeons.

A Manual of Clinical Diagnosis by Means of Laboratory Methods. By CHARLES E. SIMON, B.A., M.D. Professor of Clinical Pathology and Physiological Chemistry in the University of Maryland Medical School, and the College of Physicians and Surgeons, Baltimore, Maryland. 9th edition. Illustrated with 207 engravings and 28 plates. Philadelphia and New York: Lea and Febiger, 1918.

An extensive review of a book whose popularity survives nine editions hardly seems necessary, for the fact that repeated editions are demanded is a good index of merit and usefullness.

In the present edition many sections have been rewritten, and new matter added.

One finds the newer chemical methods for the estimation of blood sugar, blood urea, and non-protein nitrogen; also an account of the more recent methods employed in the diagnosis of acidosis. An excellent chapter on the cerebrospinal fluid includes the technic of Lang's colloidal gold test.

The division of subject matter into two parts, the first dealing with technical matters, and the second with the essential factors of the laboratory diagnosis of various diseases, is a useful arrangement.

The plates and illustrations, especially those in the section on intestinal parasites, and those illustrating the formed elements of the blood, are excellent, and deserve favorable comment.

On the whole, this seems a worthy successor to previous editions of this valuable book.

The Medical Clinics of North America. Boston Number, Vol. 1, No. 4. Philadelphia and London: W. B. Saunders Co., 1918.

The Boston Number contains contributions by 8 internists; 3 pediatricians; 1 gynecologist; 2 rhinologists; 1 oral surgeon; 1 neurologist, and 2 roentgenologists. The Massachusetts General Hospital, the Peter Bent Brigham Hospital, the Robert Brigham Hospital, the Boston City Hospital, the Children's Hospital, and the Harvard Medical School are represented. Some of the articles are more or less formal presentations of cases, pathological conditions, or diagnostic methods; others are presented in the form of real clinics as given in the amphitheatre to students.

The number begins with a series of real clinics on the heart, by Dr. Henry A. Christian, in which Complete Heart Block; Partial Block, with Stokes-Adams' syndrome; digitalis Block in Auricular Fibrillation, and Chronic Myocarditis are taken up.

On the pediatric side, Dr. John Lovett Morse, Dr. Fritz B. Talbot, and Dr. Richard M. Smith consider respectively Empyema in Children; Eczema in Childhood; and Pyelitis in Infancy. These articles are presented in an entirely practical rather than theoretical way, and one cannot fail to be impressed by the beautifully concise and logical reasoning in which Dr. Morse considers the differential diagnosis between empyema and other chest conditions.

It is obviously impossible to comment on all of these eighteen excellent contributions, but to the reviewer the paper of Dr. W. P. Graves on Ovarian Organo-Therapy, the presentation of Pathological Hemmorrhage by Dr. George R. Minot, and the clinic of Dr. J. H. Thoma on The Relation of the Teeth and Jaws to General Medicine, seem of particular interest and value.

The number closes with a contribution by Dr. G. W. Holmes on The Examination of the Heart and Great Vessels by Means of X-ray.

Typhoid Fever. Considered as a Problem of Scientific Medicine. By FREDERICK P. GAY, Professor of Pathology in the University of California. New York: The MacMillan Co., 1918.

In the words of the preface this treatise is an attempted exposition of the problem of typhoid. . . . It is not primarily designed to aid directly in the clinic or the laboratory, but should serve to point out the relations of one to the other, to indicate the dependence of practice on theory, and the happy applicability to human need of investigation that may have seemed to aim merely at the gratification of intellectual curiosity.

Chapter I begins with a general survey of the development of knowledge concerning typhoid fever, and the book closes, Chapter XIV, with suggested methods of advance in solving the typhoid problem. In intervening chapters, such questions as modes of infection, pathogenesis, diagnosis, the carrier condition, natural and acquired resistance, the protective value of vaccine against typhoid, and paratyphoid are considered. A bibliography of some 40 pages, covering references quoted in the text, adds to the value of the work.

To the man interested in the broader aspects of medicine, this book makes a strong appeal. There should be more of the same sort.

American Addresses on War Surgery. By SIR BERKELEY MOYNIHAN, M.S., F.R.C.S. Philadelphia and London: W. B. Saunders Company, 1917.

The addresses included in this volume were delivered by their distinguished author in Chicago and elsewhere during October and November, 1917. They have been brought together in book form in the hope that they may help American surgeons to some appreciation of the causes and conditions of the war, and afford some help to them in their treatment of the many new phases of surgical diseases with which they will be called upon to deal. The first paper deals with the causes of the war, and contains a striking comparison of German and English ideals. The rest of the book is devoted to the discussion of the methods which have been found to be most satisfactory in the treatment of gunshot wounds, wounds of the knee-joint, injuries to the peripheral nerves, and gunshot wounds of the lungs and pleura. Aside from the fact that the book contains most useful surgical information, the material is presented in a way which makes it intensely interesting reading.

The Treatment of Diabetes Mellitus. By ELLIOTT P. JOSLIN, M.D., M.A.; Assisant Professor of Medicine, Harvard Medical School; Consulting Physician, Boston City Hospital; Collaborator to the Nutrition Laboratory of the Carnegie Laboratory. Philadelphia and New York: Lea and Febiger. 1918.

In view of the enthusiastic reception and favorable comment accorded the first edition of this remarkable book, a review of the second edition seems almost uncalled for.

As a matter of record, however, it is sufficient to note that the book has been largely rewritten; 120 pages added; somewhat greater definiteness given in describing treatment, especially as to acid poisoning; and, in the words of the author, the book as a whole enriched and amplified by another year's study and experience with new and old diabetic patients.

Fifty-nine new tables and ten illustrations have been added.

It is impossible to commend too highly this valuable book.

Nutrition and Clinical Dietetics. By HERBERT S. CARTER, M.A., M.D.; Associate in Clinical Medicine, Columbia University; PAUL E. HOWE, M.A., Ph.D., Assistant Professor of Biological Chemistry, Columbia University; and HOWARD H. MASON, A.B., M.D., Instructor in Diseases of Children, Columbia University. Philadelphia and New York: Lea and Febiger. 1917.

A comprehensive and excellently arranged book, presenting in a readable form the more recent knowledge in respect to the nature of food and its utilization in health and disease.

The authors have happily avoided the ultra-scientific attitude and admit the consciousness of the fact that dietetics is far from a mature science, and that a book founded entirely on facts proved in the laboratory is as yet impossible.

The book is divided into four parts: Part I, dealing with digestion, absorption, and excretion, energy and food requirements, and food economics. Part II takes up the classification, analysis and digestibility of food. Part III deals with feeding in infancy and childhood. Part IV, which in point of space takes up rather more than half the book, deals with feeding in disease.

In the presentation of diet in diabetics, one finds, in addition to the older theories of diet a consideration of the Allen treatment, as well as Joslin's résumé of the Allen treatment.

The matter of food anaphylaxis, recognized in the discussion of asthma, receives no consideration in the section devoted to diet in eczema.

On the whole, a useful and reasonable book, in which various recognized principles are discussed, intelligently commented upon, with but little attempt to be dogmatic.

A Treatise on Clinical Medicine. By WILLIAM HANNA THOMPSON, M.D., LL.D., formerly Professor of Practice of Medicine and of Diseases of ths Nervous System in the New York University Medical College; ex-President of the New York Academy of Medicine, etc. Second edition revised. Philadelphia and London: W. B. Saunders Company. 1918.

A pretentious book, covering the whole field of clinical medicine, including diseases of the nervous system, obviously written by a man of wide clinical experience, and a broad general knowledge of medicine. The type is good, and so far as the publisher's work is concerned, an excellent piece of work.

Having said this much, one finds little to commend and much to criticize.

The classification of infectious diseases is unique, not to say weird. Just why typhoid, tuberculosis, cerebrospinal meningitis and leprosy should be excluded from the list of infections directly communicable and placed in the group of infections communicable by intermediate carriers, is not clear. Nor again, why angina pectoris should be discussed under functional disease of the heart.

Wherever one turns one is struck by the almost utter disregard of later work and advancement in clinical medicine, much of which, like the work of McKenzie and Lewis on the heart, seems now a fundamental part of our medical knowledge.

It is difficult to see how a modern text-book, published in 1918, can entirely disregard the work of Nicolle and Conseil, Anderson and Goldberger, and the agency of the body louse in the transmission of typhus fever, and still regard the disease as one comparable to measles in its mode of transmission and infection. It is also difficult to understand how a modern article on diabetes can completely ignore the work of Allen and Joslin, and in the matter of dietetic treatment fall back on a diet list from Osler's Practice of Medicine and the oatmeal diet of von Noorden. Any intelligent discussion of acidosis or modern tests for measuring its extent are conspicuous by their absence.

In view of the advances made by McKenzie, Lewis, and others, in the interpretation of abnormalities of the heart-beat, it seems a bit out of place to have paroxysmal tachycardia discussed as a strange functional disorder. Furthermore, where later methods are not entirely ignored, they are presented in an academic rather than a practical manner. For example: In the treatment of a case of epidemic cerebrospinal meningitis, the practitioner who finds a case on his hands will hardly be helped much by reading that "the only measure that has proved of real service is the administration of serum prepared by Dr. Simon Flexner, the use of which has been favorably reported in widely distributed epidemics both in America and Europe." In the discussion of salvarsan in syphilis, one is surprised to learn that neosalvarsan has now quite superseded salvarsan in practice, and that the technic for preparing the dose for intramuscular injection is to dissolve 0.1 grams in 180 cc. of freshly distilled sterile water.

Wherever one opens the book one is confronted by glaring inaccuracies of statement, many of which it is kinder to regard as errors in proof reading; the description of the typhoid bacillus as an organism 1 to 3 mm. in length and 5 to 8 mm. in diameter may be cited as a case in point.

However, although the reviewer can see little to commend, and much to criticize, the fact that it has been twice reprinted since 1914, besides being revised and reprinted in 1918, shows that it may be a valuable book for people who like it.

The Nervous System and its Conservation. By PERCY GOLDTHWAIT STILES. Second Edition. Revised. Philadelphia and London: W. B. Saunders Company. 1917.

This book deals with the anatomy, physiology, and hygiene of the nervous system. The structure of the neuromuscular system and the elements of nerve physiology are discussed. These subjects are treated in a scientific way; but in addition, the work gives to the reader many valuable suggestions which are of practical assistance to him in every-day life. The cerebrum is discussed with reference to its importance in human development and the life of the individual. Emotion and its stimulating effects are dealt with. Dreams are explained with reference to their importance in understanding the nervous system and its needs. The causes of nervous impairment are given in detail. Among the conditions necessary for maintaining the nervous system in a normal state are mentioned: sound inheritance, correction of physical defects, favorable environmental conditions,—such as fresh air, well-regulated illumination,—sleep, and variety in occupation and thought. The chief value of this book lies in its practical application of a thorough understanding of the nervous system to its conservation, and in the incentive which it inspires toward working out its advice.

A Handbook for School Nurses. By HELEN W. KELLY, R.N., and MABEL C. BRADSHAW, R.N. New York: MacMillan Co., 1918.

With the increasing demand for school nurses throughout the country, comes a corresponding demand for information as to how

best to organize and carry on the work; and directors and nurses turn for advice to the larger cities, where the work has passed the experimental stage, and where definite programs have been worked out. The writers of this handbook are both directing heads of established systems of school nursing, Miss Kelly being the Superintendent of Field Nurses of the Department of Health of Chicago, and Miss Bradshaw being Superintendent of School Nurses in Milwaukee, and their treatment of the subject should prove most useful. The book deals with the organization and administration of school nursing; gives the plan and character of the work, treating prevention of contagion, inspections, emergencies, physical examinations, vaccinations, cultures, dressings, care of minor contagious diseases, home calls, dispensaries, and hospitals; further touches upon educational work carried out by routine talks and health leagues; a chapter is devoted to community nursing, and another to the keeping of records.

A Handbook on Antiseptics. By HENRY DRYSDALE DAKIN, D. Sc., F.I.C., F.R.S. and EDWARD KELLOGG DUNHAM, M.D., Emeritus Professor of Pathology, University and Bellevue Hospital Medical College; Major, Medical Officers' Reserve Corps, U. S. Army. New York: The MacMillan Company, 1917.

The main object of this handbook is to give a concise account of the chief chemical antiseptics which have been found useful for surgical purposes during the present war. Many publications on this subject are not readily accessible to those who wish to inform themselves as to current European practice, and so this book has been compiled for the use of surgeons and others in this country who are now taking up military duties connected with the care of the wounded. The unparalleled severity and frequency of wound infections in the present war has led to considerable advances in the knowledge of antiseptics and of methods for their successful employment. The handbook presents in convenient form the methods of preparation and use of various new antiseptics and modifications of old ones which have received some measure of endorsement by military surgeons during the past three years. A short statement of the use of antiseptics in the treatment of carriers of infectious organisms, and of the use of certain disinfectants of the chlorine group for the sterilization of drinking water and the disinfection of hospital ships is also included.

Acute Poliomyelitis. By GEORGE DRAPER, M.D. Philadelphia: P. Blakiston's Son & Co. 1917.

This book is a practical guide to the diagnosis, care, and specific treatment of epidemic poliomyelitis. In it, Dr. Draper has combined clinical and experimental data derived mainly from his two years' experience in dealing with this disease at Rockefeller Institute. The purpose of the book is to present the more recent conception of this disease by correlating as far as possible all the facts at present available. It is designed to develop the idea that acute poliomyelitis is a general infectious disease, in the course of which paralysis is but an accidental and incidental occurrence. The book contains a history of the knowledge of the disease from the clinical, pathological, and experimental avenues of investigation. The etiology of poliomyelitis is considered under two heads: susceptibility and active forces of the disease. The author gives the results of careful study of the epidemiological, experimental, and pathological aspects of the disease. Types of paralysis are classified, and symptoms are discussed. Many cases are cited of treatment by prophylaxis and serum.

Medical Service at the Front. By LIEUT.-COL. JOHN MCCOMBE, C.A.M.C. and CAPTAIN A. F. MENZIES, M.C., C.A.M.C. Philadelphia and New York: Lea & Febiger. 1918.

There has recently been published a book entitled "Medical Service at the Front," which describes the Canadian and British medical service on the Western front. Military formations—infantry, artillery, engineers, field ambulances, divisional headquarters, transportation of ammunition and supplies—are explained. The responsibilities of the regimental medical officer at his aid post, and his activities, both preventive and curative, are considered. The book contains a detailed description of the ambulance service; its medical and transport aspects in peace warfare, its equipment and functions, the advance and main dressing stations, divisional rest stations, the scabies hospital, and the motor ambulance convoys. The field ambulance in time of battle is considered under the following heads: the advance dressing station, the walking wounded station, and the main dressing station. The factors which determine the selection of field ambulance positions are indicated, and the respective authority and responsibility of administrative officers and the organization of the corps units are discussed. The medical arrangements in the cavalry division, essentially the same as those in the infantry, include pack stations, transport sections, and field hospital sections. The functions of the clearing stations during peace and battle are mentioned. This book furnishes an account, both accurate and interesting, of the medical service at the front.

THE BOSTON
Medical and Surgical Journal
Established in 1812
An independently owned Journal of Medicine and Surgery published weekly under the direction of the Editors and an Advisory Committee, by the BOSTON MEDICAL AND SURGICAL JOURNAL SOCIETY, INC.

THURSDAY, JULY 11, 1918

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Papers for publication, and all other communications for the Editorial Department, should be addressed to the Editor, 126 Massachusetts Ave., Boston. Notices and other material for the editorial pages must be received not later than noon on the Saturday preceding the date of publication. Orders for reprints must be returned in writing to the printer with the galley proof of papers. The Journal will furnish free to the author, upon his written request, one hundred eight-page reprints without covers, or the equivalent in pages in the case of articles of greater length.

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SOME FACTORS IN SURGICAL SHOCK.

DESPITE the fact that the question of shock is so important in modern surgery, and especially in modern military surgery, only recent progress has been made in finding the basic causes. In civil surgery, shock has its important place, but it never has reached the proportional importance that it has attained in military work. It is the most important presurgical consideration and the most common postoperative complication. It must be remembered that whatever deleterious influences can bear on the causation of this condition, it is sure to be present in military conditions requiring the attention of the military surgeon. It had been the tendency to ascribe deaths caused by hemorrhage, intracranial pressures, intoxications, heart failures, etc., to shock. But shock is merely a symptomatic designation for the more or less gradual but positive fall of blood pressure, ending in death unless relieved, and so often accompanying these conditions. Shock and its attendant fall in blood pressure may occur without any of these conditions. The fall of blood pressure is due, in all likelihood, to a paresis of the musculature of the arterioles. However, many observers believe that this fall of blood pressure in shock is due to a fall in pressure in the heart or to resistance or loss of tone in other parts of the circulatory apparatus. But it is the arteriole that is the main dynamic element of the circulation, and not in this respect so much the other elements. The belief that shock is due to hemorrhage, particularly to a self-bleeding into the splanchnic veins, which for some reason accumulate all the blood, is a recent theory. But there may be marked fall of blood pressure without this form of bleeding. On the other hand, ascribing the fall of blood pressure generally and vaguely to a disturbance in the vasomotor system does not satisfy, especially in prophylaxis and in treatment.

As a later and very plausible etiological factor in the causation of surgical shock is the part played by the adrenals (Sweet, *American Journal Medical Science*, May, 1918). Any profound injury to the adrenals can cause the dangerous fall in blood pressure characterizing shock. There can be little doubt of the part that the internal secretion of the adrenals plays in the maintenance of blood pressure and circulatory tone. Systemic intoxications that affect the adrenals, as well as injury to them physically, may affect the adrenals. Anesthesia, particularly chloroform, has a deleterious effect on the adrenals. It is for this reason that chloroform is such a dangerous and treacherous anesthetic, and is so much eschewed in military surgery. The administration of adrenalin in so-called shock cases not only raises the blood pressure but supplies the secretory element of the adrenals prevented from reaching the system naturally because of some intoxication or injury to them. When the adrenals are injured by circulating toxins, saline transfusion is indicated, or where the source is intestinal appropriate washings are indicated.

Crile's theory of shock prevention in surgical operations assumes an injury to the nervous centers by the continual stimulations carried up the cord. His method of anoci-association has been followed with good results, but his theory of causation is not borne out by the

present knowledge of physiological elements in this regard. Experimentally, stimulations while impulses are sent up the cord are abolished from the higher centers by ether anesthesia. In order that Crile's facts shall agree with the physiological theory, something more must be learned on this subject. In any event, the multitude of considerations and theories, combined with the importance of the shock element, requires that the surgeon avail himself of every source of assistance, and be prepared to meet the indication. Hemorrhage must be treated as such, cranial pressure relieved, heart failure treated by stimulation, and even venesection rather than transfusion, and so on; but they should not all be called shock and given the same kind of treatment.

INTERRELATION BETWEEN MENTAL DEFECT AND DISORDER.

No persistent attempt is any longer made to draw a sharp line of demarkation between the various grades of mental deficiency or between the various types of mental disorder. At some point they all shade into each other. Yet there is a distinct tendency to separate cases of mental deficiency from mental disorder, although it is pretty well recognized that there are some instances in which some one or other form of mental disorder is engrafted on a primary mental deficiency. Both the mental deficiency and the mental disorder can well go together. The basic element at the bottom of all mental conditions is the same—the manifestations can take any form. They are merely different symptoms of the same disease; just as in mental disorders, it is found that the defective child has a greater range of personal traits or peculiarities than the normal one. Indeed, any one of these various types of personality may savor of the peculiar personalities found in frank cases of insanity. It is a fallacy to consider the defective child as one retarded in mental development merely to a certain degree. It is more logical to consider the defective child as a different type of individual than the normal. The retardation is rarely uniform, as would be expected in merely simple retardation of the mental development. More often the defective child's mental faculties may have some of their phases developed quite beyond that expected of the normal child. It is for this reason that the so-called atypical child with precocious constitution is rightly classed as a defective. In a manner, it may be said that the normal mentality in a child consists of a uniformity of development. A one-sided development must always be viewed with suspicion no matter how advanced this one side appears to be. Whenever there is a lack of equilibrium in development or in the ultimate mental equipment, there is sure to be a defective state.

Both the mentally defective and the mentally disordered show similarity in their moral conceptions. Both are often guilty of antisocial acts and often come under observation through the criminal authorities. In both there is a disharmony in their effective relations, because they are out of touch with their environment. Almost any individual will fail to measure up to the intelligence tests who for some reason, whether because of mental deficiency or mental disturbance, is out of touch with his environment. It is well understood, for example, that the epileptic conforms to both the defective and the insane types. Indeed, many of the mental peculiarities of the defective child are of epileptic character, even in the absence of convulsive seizures. The peculiar psychoses of the epileptic with seizures is, of course, well known. Almost any type of mental disorder or mental symptoms may be found accompanying an initial mental deficiency—the shut-in, the manic or the manic-depressed, the paranoid and the epileptic types. The more that mental conditions are studied, the more it is understood that all mental conditions have the universal hereditary basis, that is, one pathological ground, but that the manifestations may be quite varied. They do not conform to any hard and fast conception of type. A better understanding of the relationship between mental deficiency and disorder is necessary for prophylaxis and treatment.

BLOOD TRANSFUSION AND SALINE INFUSION.

ALTHOUGH the technic of blood transfusion is now highly perfected and performed in severe hemorrhage, the idiopathic anemias, blood dis-

eases and shock, the procedure has been known and practised for a long time. The transfusion of blood to man from other species than man is fraught with danger because of the hemolytic action of such blood. It is on this fact that the whole foundation for all the studies in hemolysis, serum diagnosis and serum therapeutics is based. But even the blood of the same species is in the nature of foreign protein and is accompanied by certain toxic effects and symptoms, commonly known as serum sickness, when injected for diagnostic or therapeutic purposes in the form of sera. However, while severe symptoms may occur from such injection, death occurs rather rarely, and then probably only because of an extreme amount of anaphylactic susceptibility. The notion that the transfusion of blood will supply something to the body that has been removed by the hemorrhage has not much foundation. Even after severe hemorrhage there remain enough blood elements to carry on body function. Moreover, it must be remembered that in so far as the value of the blood elements is concerned, it depends upon their power of bringing to the body tissues those elements either taken in by other organs of the body or manufactured by them. These cannot be supplied by even one large transfusion. On the other hand, a severe hemorrhage robs the blood column of so much fluid that the vascular apparatus has not enough of a column on which to work, and must cease working unless this column is replaced. It is for this reason that the saline infusion is so frequently given after severe hemorrhage in order to replace the fallen column and so that the heart will have something to work on. Moreover, in severe hemorrhage, where so much fluid is lost from the blood, there is a tendency to try to replace it by withdrawal from other tissues and organs. The result is that other organs suffer. The saline infusion immediately on top of a severe hemorrhage not only helps to replace the fallen blood column but supplies fluid to those organs and tissues that have been deprived of it. Of course, the saline infusion has the disadvantage that it does not possess the blood viscosity, and cannot therefore mix with it. Besides, it may filter through the blood vessels and cause edema. Unless the saline concentration is adequate it may entirely fail. When the question of saline infusion comes up, the solution in respect to concentration must be accurately made up to meet the needs of the body. In any event, a chief advantage of the saline infusion over the blood transfusion is that it is immediately available to replace the blood column or the body fluids, and there is not the untoward danger from the introduction of foreign proteins. But in chronic anemias of idiopathic or secondary origin, where the immediate urgent blood indications have passed, the massive infusion of salines may so dilute the hemoglobin, perhaps already slowly reforming, as to destroy any chance for further reformation, and recovery. Whether in these cases the transfusion of blood will add at least this element of the blood is questioned on theoretic grounds, although practically there is much clinical evidence to confirm this contention.

FOOD POISONING.

In food-conservation work, one of the most important problems is the determination of safe and unsafe foods. All the available food must be preserved and utilized, and methods must be devised which make for efficiency. This has been made a special research problem by the Department of Preventive Medicine and Hygiene of the Harvard Medical School under a grant from the National Canners' Association.

During the past year an effort has been made to get in touch with outbreaks of food poisoning and infections in order that definite knowledge might be obtained as to the origin of these cases. To be of value, reports and investigations must be immediate or else little material can be obtained, and no definite conclusions can be drawn. It has been difficult to get into immediate touch with outbreaks of food sickness, and a renewed effort is being made during the second year of the work, with the hope that those individuals who are in a position to do so will immediately report the occurrence of any cases of sickness attributed to food. In this problem there must be great dependence upon those who are practising physicians or health workers, and who by the very nature of their work are the first to come in contact with such cases.

If there occurs in your community any case, or cases, which you think are attributable to food in any way, will you not telephone

(charges reversed) the DEPARTMENT OF PREVENTIVE MEDICINE AND HYGIENE, Harvard Medical School, Boston; telephone, Brookline 2380. It is equally important that you SAVE all specimens of FECES AND VOMITUS from the affected individuals, and as large portions as possible of SUSPECTED FOODS. An investigator will then be sent out without expense to the community, and an effort will be made to establish the cause of the trouble.

M. J. ROSENAU,
Harvard Medical School.

MEDICAL NOTES.

THE BLINDED IN THE HALIFAX DISASTER.—The Department of Militia and Defence, Canada, has issued an intermediate medical report of the disaster which overwhelmed Halifax, Nova Scotia, on Dec. 6th last. As nearly as can be estimated, some 1500 people were killed and approximately 5000 injured. Of that number there were totally blind, 41 cases; one eye enucleated, 87 cases; doubtful as yet, 61 cases; total, 189 cases of eye injury. An interval of some 30 seconds took place between the first and second explosions. After the first explosion large numbers of people rushed to their windows and were looking out. The force of the explosion was sufficient to drive bits of glass clean through plaster walls and into doors at the far sides of rooms. As the result of this force and the position of the people, pieces of glass were driven into the faces of the onlookers, the eyes being specially affected. Hundreds are disfigured for life with ghastly scars. In addition to the above figures, there are 144 other cases where the final information from the social workers who follow these cases to their homes is yet incomplete. The Æsculapian Club, Toronto, has contributed $200,000 to the Endowment Fund of the Halifax School for the Blind. The report gives the following testimony to the great aid of physicians, surgeons, and nurses from the United States:—

"Too much cannot be said in praise of the American doctors, nurses, and social helpers. Their work was excellent, their spirit willing, and their assistance generous and invaluable. Some of the best surgeons in Massachusetts, Rhode Island, and Maine were represented. Special mention must be made of the American Red Cross unit from Boston, under the very capable leadership of Dr. W. E. Ladd. This unit was fully equipped, and remained in Halifax, doing excellent work, until Jan. 5th, 1918."

HEALTH REPORT OF MONTCLAIR, N. J.—The twenty-third report of the Board of Health of the town of Montclair, New Jersey, has been submitted for 1917. The report of the chemist shows that the town water, which has been examined both chemically and bacteriologically, has been uniformly good. Cultures and blood have been examined for diphtheria, typhoid, tuberculosis, and malaria. The report of the health officer records legal actions for violation of the Sanitary Code, and a resolution adopted by the Board for compulsory vaccination. Detailed statistics are given regarding population, deaths, births, marriages, and communicable diseases. The infant mortality rate for 1917 was 66 for the white population, 169 for the colored, and 78 for the Italian. Details are given relative to disinfection, complaints, fly suppression, plumbing, and the supervision of meat, milk, cream, and ice cream supplies and bakeries.

CONFERENCE OF STATE AND PROVINCIAL BOARDS OF HEALTH OF NORTH AMERICA.—The thirty-third annual meeting of the Conference of State and Provincial Boards of Health of North America was held in Washington, D. C., on June 5 and 6. An address was made by the president, Dr. J. S. B. Pratt, and Conference Committees were appointed. On June 5 reports were given of the committees dealing with conservation of vision, recent advances in sanitary laws, organization and practice, courses of study in public health and sanitary matters, sanitary policy under war conditions, pellagra, terminal disinfection, pneumonia, and the war tuberculosis problem. Addresses were given by Dr. Mathias Nicoll, Jr., Deputy Commissioner, New York State Department of Health, on "The Diagnosis of Cerebrospinal Meningitis," and by Dr. Rufus I. Cole, Rockefeller Institute, on "Pneumonia in the Army."

On June 6, reports were given of committees dealing with the progress of full-time district health officer legislation, the extension of Federal assistance in rural sanitation to the several States, and activities in public health matters by Federal Departments other than the United States Public Health Service. Addresses dealing with child conservation were given by Dr. Taliaferro Clark, U. S. P. H. S., Director, Bureau of Sanitary Service, American Red Cross, by Dr. Alonzo Taylor, Miss Mary Beard, R.N., Dr. C. St. Clair Drake, Illinois, and Dr. B. F.

Royer, Pa. Venereal diseases were discussed by W. F. Snow, M.D., Major, Medical Reserve Corps, Dr. A. J. McLaughlin, Assistant Surgeon-General, U.S.P.H.S., and Dr. H. G. Irvine, Minnesota.

COLOR BLINDNESS AMONG U. S. SEAMEN.—The importance of differentiating between those who are dangerously color blind—that is, unable at all times to distinguish between red and green—and those who are only slightly color-blind is brought out in a recent study conducted by the U. S. Public Health Service and reported in Public Health Bulletin No. 92.

The following classes are regarded as dangerously color blind and therefore to be excluded from positions in which they would be required to read colored signal lights; (1) those who are able to see but three or less colors in the spectrum (the normal person sees six or seven); (2) those who see more than three colors in the spectrum, but who have the red end so shortened as to prevent the recognition of a red light at a distance of two miles; and (3) those with a central scotoma (that is, a blind or partly blind area in the field of vision) for red and green.

It was concluded that this class of persons could be distinguished from those harmlessly color blind by the use of the Edridge-Green color lantern, which was found preferable to colored yarns. The theories on which the color lantern is based are given in detail in the publication.

Another feature of the investigation was the study of the prevalence of color blindness. Excluding those able to distinguish five colors in the spectrum, it was found that color blindness occurs in about 8.6% of men and 2.2% of women. Color blindness of a degree dangerous in occupations requiring the recognition of colored signal lights was found to occur in about 3.1% of men and 0.7% of women. Among refractive conditions of the eye, color blindness occurs least frequently in eyes apparently without demonstrable refractive error; it occurs most frequently in eyes showing mixed astigmatism.

The examinations were made as a part of other studies of the effect of illumination on vision, conducted as a part of an illumination survey of the Federal Department buildings in Washington, D. C. One thousand persons were tested with the Edridge-Green lantern to determine both the value of the lantern and the effect, if any, of refractive conditions, lesions, and anomalies of the eye, and also of sex, upon different degrees of color perception.

A special study of the Jennings self-recording worsted test was also made, 50 persons being tested with this and other tests. The results with the Jennings test were found to be too inaccurate for most work, although it was found to be superior to other tests in certain lines of work where great accuracy and the classification of color defects were not essential.

RESOLUTIONS ADOPTED AT ANNUAL CONFERENCE OF HEALTH OFFICERS.—The resolutions adopted at the 16th annual conference of State and Territorial health authorities with the United States Public Health Service, held in Washington on June 3 and 4, 1918, are printed in the Public Health Report issued for June 14, 1918. In regard to rural sanitation, it has been resolved,

"That the 16th annual conference of State and Territorial health authorities with the United States Public Health Service indorses the principle of Federal aid extension as the best means for the coördination of and making effective the work of the National, State, and local rural governments for the advancement of rural sanitation"; and

"That this conference respectfully urge the United States Public Health Service to take such steps as to secure the necessary suitable Federal legislation"; and

"That the State health organizations represented in this conference pledge their active support to the United States Public Health Service in the efforts to secure the aforesaid legislation."

Another resolution adopted, concerning the health of industrial workers, advocates that a Federal system of supervision of the health of war industrial centers be established by cooperation of the Public Health Service with State and local health and labor authorities. Concerning vaccination, it was resolved that the State of Arkansas be congratulated on having a compulsory vaccination law. In regard to the control of venereal diseases, it was resolved to indorse the principle of the Chamberlain-Kahn bill. A resolution was made relative to the committee on sanitary disposal of

human excreta, with a definite view to the preparation of plans and specifications for standard types of closets suitable to the variety of economic, geologic, and climatic conditions of this country. It was resolved, in regard to the loss of personnel from the State and local health organizations, that the United States Public Health Service ascertain by questionnaire the number of public health workers that have left the employ of the States for Federal service. Another resolution was passed providing that a committee of five be appointed to confer with the committee on sanitary policy under war conditions.

WAR NOTES.

AMERICAN RED CROSS GIVES SWISS SOCIETY $100,000.—Charles P. Bennett, representative of the American Red Cross in Switzerland, has remitted $100,000 to the Swiss Red Cross, as an appreciation on the part of America for the work Switzerland has done for the victims of the war, especially the wounded prisoners of the Entente Nations in Germany.

AMERICAN HOSPITAL IN PLYMOUTH, ENGLAND.—Major General Cooper gave a garden party, on June 15, in honor of the staff of the American Base Hospital. Americans numbering 350, including 120 nurses in motor ambulances, paraded through the principal streets of the city, headed by the Mayor and prominent naval and military officials.

BASE HOSPITAL COMPLETED.—The United States base hospital on Fox Hills, Staten Island, has been completed in less than half the scheduled time. The thirty buildings are capable of accommodating 3000 patients. They were practically finished forty-two days after the work started. It was expected to take ninety days. The hospital will probably be enlarged soon to double its present capacity.

It is reported that the Government has taken over the new concrete building of a paper manufacturing concern at Grassmere as a storehouse for the hospital.

HOME GIVEN FOR NAVY HOSPITAL.—Commodore and Mrs. Morton F. Plant, of Brandford House, Eastern Point, Connecticut, have given to the Navy Department for the duration of the war, the use of the Watson House for a hospital for convalescing sailors and soldiers. The use of the residence is accompanied by a gift of $10,000 to equip the hospital.

The building is located on the bank of the Thames river, and is ideally adapted for the purpose to which it will be put. The Navy Department has accepted the use of the house and the gift of $10,000 and will immediately start to make the necessary alterations. The house contains a large number of rooms, and it is expected that it will accommodate at least 65 patients.

WAR RELIEF FUNDS.—On July 6, the totals of the principal New England War Relief funds reached the following amounts:

Belgian fund	$682,568.54
French Wounded fund	380,187.44
French Orphanage fund	378,442.60

SCHOOL FOR WAR NURSES AT CAMP DEVENS.—The War Department is organizing training schools for nurses in some of the army hospitals and camps. The first training camp for nurses may be opened at Camp Devens. The plan is to open each training school with a class of twenty-five student nurses and add to this number in precisely the same way that civilian hospitals take in new classes.

"The object of these camps is to train young women of at least high school education in these military hospitals as they train them in civil institutions, by giving them practical work in the wards and theoretical training in the school rooms.

The students will do there, as they do in the civilian training schools, the major part of the manual labor of the nursing and release so many more trained nurses for the more difficult phases of military nursing.

To perfect them in the entire course, it will be necessary to transfer them for a part of their three years' course to some affiliated civilian hospital. They will do this only in case they can be spared from army work, for they are regarded as cadets and midshipmen, ready to be called upon as partly trained."

While these schools are intended to supplement the Army Nurse Corps, they will be valuable also in reconstruction work, and will extend both to the men disabled in the war and to the women who will break down through the strain of war hardships.

ACADEMIC HONOR FOR MAJOR HARVEY CUSHING.—A recent issue of the JOURNAL has noted the conferring of the honorary fellowship of the Royal College of Surgeons in Ireland on Major Harvey Cushing, professor of surgery at Harvard University and now in the United

States Army. The *Lancet* has published the following statement:

The College "has been singularly happy in its latest choice, as Major Cushing, by his professional eminence, will bring credit to his adopted College, while his election is a compliment to the service of which he is so good a representative. For the past twelve months, our troops in France have been so fortunate as to have his skill at their service. Major Cushing is already an honorary Fellow of the Royal College of Surgeons of England. The College is very chary of electing honorary Fellows, and in its whole history has admitted only some threescore."

THE RETIREMENT OF SIR ARTHUR SLOGGETT: APPOINTMENT OF LIEUTENANT-GENERAL BURTCHAELL.—The following account of the retirement of Sir Arthur Sloggett and of the appointment of Lieutenant-General Burtchaell, has been published in the *Lancet:*

"Sir Arthur Sloggett, who has filled for three and a half strenuous years the position of Director-General of Medical Service on the Western front, has retired on reaching the age-limit for service on the Active List. His elasticity of mind, receptiveness in respect of new ideas, and acumen in seizing on their essential points, his frank recognition that his own knowledge on many subjects could not be equal to that of the various experts, his lack of fussiness, and his sense of fairness were the qualities that commanded for him the respect of his colleagues in all ranks.

His successor, Lieutenant-General C. H. Burtchaell, has had an unrivalled experience of army medical administration at home and abroad, with the Indian N.W. Frontier campaign of 1897, and as staff officer to Lord Methuen's division of the South African Field Force. In 1907 he was appointed headquarters staff of the Irish Command, until his transference to the War Office as Assistant Director-General in June, 1910. Since October, 1914, he has been in France, and closely associated in the development of the reorganizations required to meet the changing needs of a growing army. To his intimate knowledge of the life and requirements of the British soldier, General Burtchaell has added during the last two years a close association with the Overseas Forces which will stand him in good stead and act as a firm bond between the medical services. It is of particular advantage to know that the appointment of General Burtchaell is gratifying to the Overseas Forces; the Canadians especially welcome his appointment, for he came into close association with their forces at the second battle of Ypres, since when the bond of sympathy has continued to strengthen. General Burtchaell assumes his vast responsibilities at a critical juncture, but his familiarity with the problems of military life, as they must affect professional organization and efficiency, will enable him to act with the directness that makes for success."

BOSTON SURGEONS ADVANCED IN RANK.—Dr. Harvey Cushing and Dr. Joel E. Goldthwait of Boston and Dr. George W. Crile of Cleveland, Ohio, have been promoted from the rank of major to that of lieutenant-colonel.

25,000 TRAINED NURSES NEEDED.—At a mass meeting held in the State House to rouse enthusiasm for the recruiting of girls for nursing in army and civilian hospitals, Miss Elizabeth Ross, of the nursing division of the Red Cross, said that there are fifteen miles of hospitals at the front which must be manned by American girls. Besides this, there are forty army hospitals in this country which need trained workers.

Miss Mary T. Beard of the Red Cross said that 25,000 girls are needed by January 1, to fill the ranks of those who have gone to the front. She asked each girl present at the meeting to endeavor to secure five friends to join.

Miss Anne Strong of Simmons College said that parents must be prepared to give their daughters to the country as well as their sons. She alluded to the fact that one of the proposed army hospitals is to be located at Camp Devens, and urged all New England young women in a position to do so to enlist for service in this hospital or the many other civilian institutions in this section.

Major H. E. Ernst, a member of the medical staff, said that there is no fear that girls joining for a three-year course will be removed from training through the hospitals closing.

FOUR BAY STATE MEN COMMISSIONED.—The following appointments in the Officers' Reserve Corps have been announced:

Captain, W. M. Tyler, Lexington, Medical Reserve; first lieutenant, Medical Reserve, W. E. Sedgwick, Palmer; first lieutenant, N.A., F. H. Judge, Boston; and first lieutenant, Q.M.C., E. H. Whittaker, Worcester.

DR. CHASE COMMISSIONED CAPTAIN.—Dr. Gilman L. Chase, of Clinton, has been commissioned as Captain in the Medical Officers' Reserve Corps, and now awaits assignment. Dr.

Chase is a son of Dr. A. L. Chase of the State Board of Registry in Medicine. He was born in Randolph, and was educated at Thayer Academy, Harvard College, and Harvard Medical School. He served at the Worcester City Hospital, and then went to Clinton about twelve years ago, where he has been town physician and on the staff of the Clinton Hospital. He is a Fellow of the American Association of Surgeons.

PROMOTION FOR DR. MEDALIA.—Dr. Leon S. Medalia, of Boston, who has been stationed, since August, 1917, as Chief of Laboratory, Base Hospital, Camp MacArthur, Waco, Texas, has been promoted to the rank of Major, Medical Reserve Corps, U. S. Army.

BOSTON AND MASSACHUSETTS.

WEEK'S DEATH RATE IN BOSTON.—During the week ending June 29, the number of deaths reported was 207, against 242 last year, with a rate of 13.77, against 16.34 last year. There were 27 deaths under one year of age, against 37 last year.

The number of cases of principal reportable diseases were: diphtheria, 53; scarlet fever, 20; measles, 140; whooping cough, 52; typhoid fever, 3; tuberculosis, 88.

Included in the above were the following cases of non-residents: diphtheria, 14; scarlet fever, 2; whooping cough, 2; tuberculosis, 7.

Total deaths from these diseases were: diphtheria, 1: measles, 1; whooping cough, 4; tuberculosis, 28.

Included in the above were the following non-residents: tuberculosis, 1.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH APPOINTMENTS.—Dr. Merrill E. Champion, State District Health Officer for the Eastern District, has been appointed Director of the Division of Hygiene, State Department of Health.

At the request of the Commissioner of Health, Captain Alec N. Thomson, Medical Reserve Corps of the Section for Combating Venereal Diseases, Office of the Surgeon-General, War Department, has been detailed to the State Department of Health for a period of three months. Captain Thomson has had a wide experience in establishing and conducting venereal clinic activities in the Army, and before he entered the Service was Director of the Venereal Clinic at the Brooklyn (New York) Dispensary. In the position of Temporary Chief of the Sub-division of Venereal Diseases he will be occupied with the details of the establishment and operation of the State Approved Venereal Disease Clinics.

In this connection it is also announced that Dr. Mary A. Lakeman of Salem has been appointed Epidemiologist in the Subdivision of Venereal Diseases. Dr. Lakeman's principal activities will be the organizing and coördinating of follow-up systems in the State Approved Venereal Disease Clinics.

DORCHESTER PHYSICIANS' WIVES ASSOCIATION.—There will be a meeting in the near future, under the auspices of the Dorchester Physicians' Wives Association, for the purpose of discussing the further enrollment of physicians in the service of the Army and Navy. The time and place of this meeting are now being planned.

The Association is making an appeal to the wives of the physicians of Greater Boston in order to assist the Massachusetts State Committee of the Council of National Defense, Medical Section, in its work of bringing home to the doctors their duty and their great opportunity in the present National Emergency.

For the sacrifices which doctors are asked to make in entering the service, the compensations, financial and other, which will accrue to them, will, at this meeting, be more fully pointed out.

Many doctors who feel it is impossible for them to accept commissions, would, if they understood the situation, feel that they could not afford to stay at home.

BETH ISRAEL HOSPITAL.—The directors of the Beth Israel Hospital have purchased a house adjacent to hospital grounds, for the establishment of an up-to-date out-patient department. A medical staff has already been organized, and it is expected that by the middle of August the building will be thrown open to the service of the community.

The directors, at a special meeting, have passed resolutions offering to the Government of the United States, ten beds for the treatment of wounded sailors and soldiers returning to the City, and if the Government would pro-

vide tentage, to offer all the grounds so as to accommodate at least 100 patients.

DR. EDSALL NAMED DEAN OF HARVARD MEDICAL SCHOOL.—Dr. David Linn Edsall will succeed Dr. Edward Hickling Bradford as dean of the Harvard Medical School. Dr. Edsall was born in Hamburg, N. J. He received the degree of A.B. from Princeton in 1890 and a medical degree from the University of Pennsylvania in 1893. After several years of practice and research work, he joined the University of Pennsylvania medical staff, where he served until 1911, both as a professor of therapeutics and pharmacology, as well as medicine. He came to Harvard in 1912 as Jackson professor of clinical medicine, having spent the preceding term at Washington University, St. Louis.

Dr. Edsall is chief of the medical service of the Massachusetts General Hospital, and has been active in many public health matters in this State, being a member of the Public Health Council. Since the outbreak of the war he has served with the following committees: State and Boston branches of the Medical Committee of the Council of National Defense, Executive Committee of the Committee on Medicine, Hygiene and Sanitation of Boston Public Safety Committee, Committee on Public Health of the National Food Administration and Advisory Committee of the Surgeon-General's Office on Vocational Training of Disabled Soldiers. He is also active in organizing the new work in industrial hygiene, which has recently been undertaken by the medical school.

WORCESTER MEMORIAL HOSPITAL TRAINING SCHOOL.—Commencement exercises at Memorial Hospital Training School, Worcester, were held on June 28. In many cases the graduation of the nurses corresponded to the completion of courses in military training schools, and a number of the graduates have planned to enter army work at once.

Major Homer Gage of Camp Devens, head surgeon at the Hospital at the time he entered the Medical Reserve Corps, addressed the graduates.

ST. ELIZABETH'S HOSPITAL.—At the graduation exercises of the Nurses' Training School of St. Elizabeth's Hospital, Brighton, thirty young women received their diplomas. Five of them have already entered service.

The exercises were presided over by Dr. John R. Slattery, superintendent of the hospital. Rt. Rev. Mgr. John B. Peterson, president of St. John's Seminary, addressed the graduates, representing Cardinal O'Connell.

GIFT FOR CITY HOSPITAL.—By the will of the late A. Shuman, the city of Boston is given $100,000 to erect on land on Dorchester Avenue a building for patients convalescing from acute diseases following treatment in the City Hospital, except those convalescing from alcoholism. The building is to be known as the "A. Shuman Memorial Building for Convalescent Men," and in a certain contingency may be erected in West Roxbury.

Mr. Shuman was for many years chairman of the board of trustees of the Boston City Hospital, and was a staunch friend of that institution and of medical education.

GODDARD HOSPITAL.—The annual report for the year 1917 has been published by Goddard Hospital, Brockton, Mass. This is a private hospital, established in 1902, for the treatment of obstetrical and surgical cases. During the past year, there have been treated 553 cases, of which 212 were obstetrical, 328 surgical, and 13 medical. On account of the limitation in the number of surgical beds, the surgical work has been confined almost wholly to operative surgery, especially of the abdominal type. The total mortality for the year was 1.4%. Plans have been made for the purchase of a new hospital building. The report contains detailed statistics concerning the obstetrical cases, the surgical operations, and the medical cases.

NEW HEALTH COMMISSIONER APPOINTED.—Dr. Francis X. Mahoney, Health Commissioner of Boston for the past eight years, has resigned, and will be succeeded on August 1 by Dr. William C. Woodward, Health Officer of the District of Columbia.

Dr. Woodward was born in Washington, Dec. 11, 1867. He graduated from Georgetown University in 1889, later taking a medical course at the University of Pennsylvania.

He has held his present position since 1894, and has taken part in the activities of various National health associations.

He has been president of the American Pub-

lic Health Association, of the Conference of State and Provincial Boards of Health of North America and of the American Association for the Study and Prevention of Infant Mortality. He is a director of the American Society for the Control of Cancer, a fellow of the American Medical Association, a member of the General Medical Board of the Council of National Defense, of the National Commission on Milk Standards, and of the National Tuberculosis Association.

INDUSTRIAL HEALTH CONFERENCE AT FITCHBURG.—A State-wide effort to develop means of making healthy and strong the internal life of the State in its industrial activities was inaugurated today at an industrial health conference held here under the auspices of the State Board of Labor and Industries with the cooperation of the Massachusetts Medical Society.

Physicians, business men, labor leaders and social workers participated in discussions of industrial health work and the movement to eliminate as many as possible of the hazards of industry.

An address on "The Duties of the Physician in the Prevention of Industrial Diseases" was made by Dr. Harry Linenthal of Brookline, and other speakers included Dr. Alfred H. Quessy of the State Board of Labor and Industries, and Dr. Thomas F. Harrington, Deputy Commissioner of Labor.

APPOINTMENTS AT HARVARD.—Among the appointments recently announced at Harvard, several Medical School promotions were made known:

Dr. Paul Thorndike of the Boston City Hospital was advanced to clinical professor of genito-urinary surgery, to take effect in September.

Dr. George R. Minot of the Massachusetts General Hospital and Dr. Isaac C. Walker of the Peter Bent Brigham Hospital were advanced to assistant professorships of medicine for the duration of the war.

Dr. Cyrus H. Fiske, assistant professor of biological chemistry at Western Reserve University, Cleveland, has accepted a similar place at Harvard, from whose medical school he was graduated four years ago.

BOSTON HEALTH DEPARTMENT.—The April issue of the bulletin of the Health Department of Boston describes the work and plans of the Health Department. It reports that the general death rate has been slowly decreasing, and that the infant mortality rate fell last year below 100 per 1000 to 99.1. Excluding the deaths of children brought from outside the city, Boston's infant mortality stands at 79.7 per thousand.

In dealing with the tuberculosis problem, Boston has divided the responsibility between the Health Department and the Consumptives' Hospital Department. Not less than 8,000 cases of venereal diseases in a contagious stage have been found in the city. In order to increase public education, a "Health Unit" is maintained on Blossom Street, where talks are given regularly in different languages on various health topics. The Child Welfare Committee has undertaken to save 3094 children, Massachusetts' quota, during Children's Year. A report on measles, and suggestions concerning flies, summer diseases, the care of homes and yards, are offered.

The bulletin contains, also, a list of the courses offered for the summer of 1918 at the School of Public Health of Harvard University and the Massachusetts Institute of Technology. Statistics are given concerning pulmonary tuberculosis, mortality rate, and inspection of milk, food, and sanitary conditions. Deaths reported for the month of April have amounted to 1163, against 1102 in the corresponding period last year.

HARVARD TO OFFER COURSE IN TREATMENT OF OCCUPATIONAL DISEASES.—A course of training intended to meet the varying problems of occupational diseases and industrial health is proposed by the Harvard Medical School, in order to assist employers of labor in maintaining a health standard in their plants. Harvard authorities have taken counsel with a number of leading employers of labor in New England and received such encouragement that they have decided to open such a school in the fall.

Quite apart from the humanitarian aspect of the question, it is becoming recognized that good health makes for efficiency and contentment. Harvard authorities, in starting the school, have in mind the progressive corporation employing about 8000 persons. The organization will include, in part, six full-time physicians, two dentists, an oculist, and a full

corps of nurses. Three applications have been received recently at the school from corporations for doctors to take charge of health activities. The demand is increasing, and there is today no medical school in the country which offers an adequate course of training to meet it. At present, physicians holding these positions have to learn by experience how best to apply their general medical knowledge to the problems encountered in the treatment of industrial patients.

The plan will be financed by annual subscriptions from corporations and individual employers for five years, and it has been estimated that the moderate sum of $25,000 a year will justify the undertaking. It is hoped that by the end of that period it will be possible to obtain permanent endowment.

The ultimate end in view is the development of a center to which any employer of labor, large or small, can apply for expert aid in the solution of any problem pertaining to industrial health. The response to the appeal has been such as to justify the belief that the full sum desired will be in hand within a reasonable time. Plans are now being made to begin systematic work October 1.

The following group have consented to act as an advisory committee of business men: Captain W. E. McKay of the Massachusetts Gas and New England Manufacturing Companies; S. Harold Greene, of Lockwood, Greene and Co.; and Frank J. Hale, of the Saco-Lowell shops.

BOSTON DISPENSARY.—The 121st annual report of the Boston Dispensary shows that it has rendered even larger service than ever before. Twenty-seven doctors, about one-third of the Medical Staff of the Dispensary, have entered the military, naval, or Red Cross service during 1917. The work of the Dispensary has been increased necessarily because of its co-operation with the State Department of Health and the Council of National Defense, in enlarging its clinics for venereal disease. The evening pay clinics have given noteworthy service to wage-earners, and have assisted in preserving their health and productivity. About 40,000 patients have been treated by the Boston Dispensary during 1917. Of these 15,000 were babies and children, among whom the Social Service Department labors to prevent as well as to cure disease.

"BOSTON UNIT" READY FOR SERVICE.—The military medical unit, officially known as Base Hospital 51, and popularly designated, "Boston Unit," has been mobilized at Camp Wheeler. It has for its officers chiefly men from Boston and vicinity, and it includes probably 100 nurses who are graduates of Boston schools. The staff was formed through the energy of Major Fred B. Lund, who served in Base Hospital 22, British Expeditionary Forces, in France during 1915. Lieut.-Col. Frederick A. Tucker, of Indianapolis, is in command as chief administrative officer. The officers of the Boston Unit are all graduates of the army medical training schools at Camp Greenleaf, Fort Riley, or Fort Benjamin Harrison, and several of them have been in active service in France. Among the officers included are:

Major A. Quackenboss; Captains L. S. Hapgood, J. A. McLean, G. W. Miller, N. R. Mason, F. W. Lester, Homer B. Smith, Lieutenants P. H. Leavitt, W. C. Hardy, A. W. Hubbard, M. R. Kendall, L. S. McQuade, A. T. Moulton, Donald Munro, L. G. Moore, William R. Morrison, R. S. Eustis, G. W. Papen, Roy S. Perkins, W. M. Pettingill, S. B. Ross, Eugene B. Cass; and two dental surgeons, Lieutenants John S. Kellogg and Gilbert H. Gauerke.

NURSES' TRAINING SCHOOL AT VASSAR.—America's first great training school for war nurses opened at Vassar College with an attendance slightly exceeding 500 young women graduates of colleges from all over the United States.

At the convocation which preceded the opening of the three months' training course, women from 43 States were present, representing 110 colleges.

Pres. Henry N. MacCracken of Vassar, presided at the opening ceremonies in the chapel. Among the speakers were Eliot Wadsworth and Mrs. John W. Blodgett, a trustee of Vassar.

The official designation of the camp is a school of science applied to trained nursing. Most of the graduates, after another year's hospital training, will be available for service with the American Expeditionary Forces.

NORFOLK STATE HOSPITAL.—The fourth annual report of the Norfolk State Hospital has

been submitted for the year 1917. The work of the out-patient department in dealing with inebriates has been considerably increased, and there are now twenty-eight out-patient offices maintained by the hospital. During the year, 1500 patients have been in actual residence at the hospital, and the term of the average patient has decreased from seven weeks in 1914, to four weeks in 1917. Because the hospital has a unique acquaintance with the nervous disorders which often underlie the addiction to alcohol, it is the hope of the staff that the facilities of the hospital may be placed at the disposal of the National Government for the care of cases of nervous shock which will be sent from the front. Statistical tables concerning patients are included in the report.

NEW ENGLAND NOTES.

DENTAL CONVENTION IN PORTLAND.—The annual convention of the Maine Dental Association was held on June 27. About one hundred and fifty persons attended. Papers were read by Dr. Norman B. Nesbit of Boston, Dr. Archer Jordan of Auburn, Dr. Percy R. Howe and Dr. Fred W. Allen of Boston. An address was made by Dr. Henry Gilman of Portland on dentistry and the war. Clinics were held during the day.

PAWTUCKET HEALTH REPORT.—The Board of Health of the City of Pawtucket has submitted an annual report for the year 1917. During the past year there have been reported 275 cases of contagious diseases, 188 have been quarantined and fumigated, 1283 diphtheria cultures have been taken by inspectors, and 2808 nuisances have been investigated and inspected. It has been deemed advisable to placard both measles and typhoid fever. The city is in great need of a hospital for contagious diseases.

In regard to the inspection of beef, Pawtucket should have some support from the State, inasmuch as over 90% of the dressed meats are sold in Providence and the neighboring cities. The city needs, also, a full-time milk inspector, who is competent to do the bacteriological work for the health department.

The Massachusetts Medical Society.

PROCEEDINGS OF THE SOCIETY.

First Day, June 18, 1918.

CLINICS and demonstrations were held during the morning at the principal hospitals of Boston. All of the exercises of the anniversary were held at the Boston Medical Library, 8 The Fenway, Boston, beginning with the annual meeting of the Supervisors, June 18, at 11.30 a.m., followed by the annual meeting of the Council at noon, 116 Councilors being present. Meetings of the Sections of Medicine, Surgery, Tuberculosis and Hospital Administration were held in the different halls of the building. A detailed and corrected program of the meetings and the officers of the Sections is to be found in the BOSTON MEDICAL AND SURGICAL JOURNAL for June 13, 1918, Vol. clxxviii, pages 833-835.

The following officers of the sections were elected for the ensuing year by the sections:

Section of Medicine: *Chairman*, George A. Bancroft, Natick; *Secretary*, William David Smith, Boston.

Section of Surgery: *Chairman*, Howard A. Lothrop, Boston; *Secretary*, Hilbert F. Day, Boston.

Section of Tuberculosis: *Chairman*, Henry D. Chadwick, Westfield; *Secretary*, E. O. Otis, Boston.

Section of Hospital Administration: *Chairman*, George G. Sears, Boston; *Secretary*, Channing C. Simmons, Boston.

The Shattuck Lecture was delivered in the evening by Dr. E. E. Southard of Boston on the topic: "Shell Shock and After."

Following the lecture, refreshments were served in the supper-room.

Second Day, June 19, 1918.

The Society met at the Boston Medical Library for the exercises of the one hundred and thirty-seventh anniversary. The President, Dr. Samuel B. Woodward of Worcester, was in the chair and three hundred and eighty Fellows and guests were present during the morning. The minutes of the last meeting were read and accepted. The Secretary announced that during the past year the Society had lost by death 58 Fellows, by resignation 10, by deprivation of the privileges of fellowship 5, total loss 73. The Society had gained 96 Fellows as follows: restoration by the Council 7, new Fellows 89, total net gain 23, making the membership of the Society, June 19, 1918, 3689.

The President introduced Dr. Arthur T. Jones of Providence, who brought the greetings from the Rhode Island Medical Society.

The readers of the papers on the printed program being unable to be present, Major

Henry D. Jump, M.R.C., of Philadelphia, of the Council of National Defense, spoke to the meeting on the need of officers for the Medical Reserve Corps of the Army, and explained the present situation and the duties and the details of the training of officers for this Corps.

Colonel Franklin Martin of the Advisory Commission of the Council of National Defense addressed the meeting on the same topic, and he explained the provisions of the Volunteer Medical Service Corps.

There was patriotic singing by the audience, led by Dr. John B. Hawes, 2d.

At 11 o'clock the following distinguished British visitors arrived at the meeting and were greeted by *God Save the King*, sung by the audience: Sir James Mackenzie of the London Hospital, Sir William Arbuthnot Lane of Guy's Hospital, London, and Colonel Herbert A. Bruce, Consulting Surgeon of the British Armies in France. Each of the visitors addressed the meeting. Sir James Mackenzie recounted the experiences of the medical profession in England during the present war, and said that it had found itself not so well fitted for the work as it had thought. He said that at present they had a hospital where the cases of medical men who had broken down from overwork were studied, and that this aspect was an important one for the profession of both countries at the present time. Colonel Lane paid a tribute to the assistance which had been given to the British Army by American medical men and spoke of the great progress which had been made in plastic surgery to restore the features of the men who had had their faces destroyed by the modern methods of warfare. He closed by reminding his hearers that Americans said that they "can lick creation" and now they should not eat their words. Colonel Bruce spoke of the progress made in the art of transfusion and said that blood now could be collected and preserved for as long a time as a month, and that it was extremely useful in repairing the loss due to hemorrhage. He paid a tribute to the part that the American surgeons had played in the war, and urged the need of further enlistments.

At 12.10 the Annual Oration was delivered by Dr. Myles Standish, of Boston, on the subject: "Socialization of the Practice of Medicine."

At the close of the discourse the thanks of the Society were conveyed to the orator by vote of the meeting.

In the afternoon the Section of Hospital Administration and the combined sections of Medicine and Surgery met at the Library and listened to the papers set forth in the program.

The Annual Dinner having been omitted by vote of the Council, on account of war conditions, the Society adjourned *sine die*.

WALTER L. BURRAGE,
Secretary.

ADMISSIONS REPORTED FROM JUNE 13, 1917, TO JUNE 19, 1918.

Year of Admission.	Name.	Residence.	Medical College.
1917	Armstrong, Donald Budd,	Framingham	17
1917	Barnes, Louis Dwight,	Lanesborough	7
1917	Bearse, Carl,	Boston	12
1917	Bristol, Delos Judson, Jr.,	Boston	2
1917	Brown, Henry Seabury,	Boston	12
1917	Bruce, Jacob Baldwin,	Boston	11
1917	Bryan, William Alvin,	Danvers (Hathorne)	3
1917	Budreski, Alphonse Frank,	Brighton	12
1918	Casey, Chester Arthur,	Lawrence	12
1917	Chaput, Lucien Romeo,	Haverhill	32
1918	Churchill, Anna Quincy,	Dorchester	12
1918	Cohen, Samuel Adams,	Roxbury	12
1917	Cosgrove, Joseph Justin,	Westfield	12
1917	Curran, George Lally,	North Adams	30
1917	Currie, Inez Margaret,	Worcester	12
1918	Davidson, Alfred,	Chelsea	12
1917	Dexter, Roderick Besnard,	Dorchester	26
1917	Driscoll, DeCourcey John,	Lynn	8
1918	Emard, George Adelbert,	Mansfield	12
1918	Feldman, Aaron,	Boston	12
1917	Frankel, David Israel,	Boston	10
1917	Gaetani, Arthur Leonard,	Dorchester	12
1917	Garbelnick, David Abraham,	Boston	10
1917	Garrett, Frank Steele,	Chelsea	8
1917	Garrick, Nathan Henry,	Cambridge	10
1918	Généreux, Edmond Alfred,	Worcester	11
1917	Gibby, Harold James,	Worcester	19
1917	Gordon, Samuel Finley,	Mattapan	24
1917	Green, Milo Chester,	Boston	10
1918	Guralnick, Rubin,	East Boston	12
1918	Hart, Francis Denbroeder,	Worcester	12
1918	Hayden, John Joseph,	Worcester	8
1917	Haywood, Ralph Winson,	Salem	5
1917	Healy, William,	Boston	18
1917	Heininger, Arthur Gustav,	Gardner	22
1917	Herbert, Edward,	Fall River	17
1918	Herman, Edwards Woodbridge,	Boston	11
1917	Hodgdon, Frank Wellington, Jr.,	Boston	11
1917	Howard, Harvey James,	Boston	19
1917	Hughes, George Frederick,	Somerville	12
1918	Hughes, John,	Holyoke	22
1918	Hunt, Frank Hamilton,	Mattapan	43
1918	Hurley, William Cyril Rowe,	Quincy	12
1917	Hyman, Clarence Henry,	Boston	11
1918	Jones, Fred Durgin,	Springfield	12
1918	LaRochelle, Arthur Henry,	Springfield	38
1917	Leavitt, Mary Augusta,	Medford	10
1917	Leland, Harold Leander,	Boston	10
1918	Lichtenthaeler, Marguerite Emile,	W'l'sl'y, H'ls	10
1917	Loewe, Walter Ralph,	Dorchester	12
1918	Lowry, Franklin Patterson,	Newton	11
1917	Kable, Josephine Downie,	Wrentham	12
1918	Keown, James Archibald,	Lynn	11
1918	Klein, Armin,	Chelsea	11
1917	McCarthy, Charles Daniel, Jr.,	Malden	12
1917	McCarty, Edward Michael,	Somerville	20
1917	McClintock, Elsie,	Gardner	12
1917	Medalia, David Bernard,	Boston	12
1918	Merritt, Robert Elmer,	Wollaston	12
1917	Meyers, Hyman Bernard,	Chelsea	12
1918	Mintz, Samuel Charles,	Boston	12
1917	Morrison, Lawrie Byron,	Boston	22
1917	New, Way Sung,	Boston	11
1917	Papen, George William,	Boston	12
1918	Parker, Charles Clinton, Jr.,	Roxbury	12
1917	Record, Harold Roland,	East Braintree	12
1917	Rice, Florence Frances,	Cambridge	12
1917	Ripley, Harold William,	Boston	10
1918	Robbins, Edmund Henry,	Somerville	14
1917	Rockwell, John Arnold, Jr.,	Cambridge	10
1917	Ross, Elizabeth,	Cambridge	10
1917	Rowland, Edward Gould,	Natick	8
1918	Rowley, Philip William,	Gloucester	12
1918	Sannella, Salvatore,	Springfield	12
1918	Saunders, Thomas Henry,	Webster	44
1918	Savage, Ross Eliot,	Tisbury	5
1918	Schön, Edward,	Lynn	20
1918	Segal-Roitman, Jennie,	East Boston	20

Year of Admission.	Name.	Residence.	Medical College.
1918	Shaw, Thomas Wignall,	Lynn	12
1917	Simon, Harold Francis,	Winchester	10
1917	Sisson, Warren Richards,	Boston	6
1917	Smith, Lillian Richardson,	Worcester	12
1918	Sullivan, Daniel Thomas,	Mansfield	1
1917	Sundelöf, Ester Mathilda Eleonora,	Roxbury	12
1918	Walker, Waldo Webster,	West Somerville	34
1917	Watt, George,	Worcester	11
1917	Willey, Walter Brown, Jr.,	Brighton	12
1917	Williams, Frederick Russell,	Worcester	16
1918	Woodward, Le Roy Albert,	Worcester	12

Total=89.

KEY TO MEDICAL COLLEGES.

1 Bellevue Hospital Medical College.
2 Yale University, Medical Department.
3 George Washington University, Dept. of Medicine.
5 Bowdoin Medical School.
6 Johns Hopkins University, Medical Department.
7 College of Physicians and Surgeons, Baltimore, Md.
8 Baltimore Medical College.
10 Boston University School of Medicine.
11 Medical School of Harvard University.
12 Tufts College Medical School.
14 Dartmouth Medical School.
16 Long Island College Hospital.
17 Columbia University, College of Physicians and Surgeons.
19 University of Pennsylvania, Dept. of Medicine.
20 College of Physicians and Surgeons, Boston.
22 University of Vermont, College of Medicine.
24 Medico-Chirurgical College of Philadelphia.
26 McGill University, Medical Faculty.
30 New York University and Bellevue Hospital Medical College.
32 University of Maryland, School of Medicine.
34 State University of Iowa, College of Homeopathic Medicine.
38 Jefferson Medical College.
43 University of Virginia, Department of Medicine.
44 Maryland Medical College.

DEATHS REPORTED FROM JUNE 13, 1917, TO JUNE 19, 1918.

Admitted.	Name.	Place of Death.	Date of Death.	Age.
1877	Adams, Edwin Boardman	Springfield	Dec. 21, 1917	66
1873	Adams, John Quincy	Amesbury	Oct. 18, 1917	67
1873	Bemis, Charles Albert	West Medway	Sept. 13, 1917	69
1861	Blake, John George	Boston	March 4, 1918	80
1867	†Bowen, Seabury Warren	Fall River	May 2, 1918	77
1883	Bradley, Charles Seymour	Roxbury	Jan. 10, 1918	64
1905	Brown, Edward Manning	Springfield	Oct. 22, 1917	45
1912	Burns, Newell Bly	North Reading	Oct. 27, 1917	35
1868	†Carleton, Charles Greenleaf	Lawrence	Dec. 17, 1917	74
1895	Chicoine, Isadore Hermanigilde	Lynn	Aug. 8, 1917	52
1903	Clapp, Arthur Martin	Springfield	Oct. 31, 1917	41
1878	†Copeland, Horatio Franklin	Whitman	Feb. 8, 1918	75
1905	Coté, Honoré Joseph	Boston	Nov. 7, 1917	56
1905	Craig, William Gibson	Springfield	Nov. 15, 1917	49
1866	Crocker, John Myrick	Cambridge	Oct. 6, 1917	72
1896	Cronin, Henry William	Worcester	Aug. 20, 1917	54
1873	Currie, John Zebulon	Arlington	Nov. 10, 1917	70
1887	Cutts, Harry Madison	Brookline	Feb. 21, 1918	59
1893	Donnelly, John Bernard	West Gardner	Aug. 2, 1917	50
1865	†Driver, Stephen William	Cambridge	May 21, 1918	85
1874	Dunn, William Aloysius	New York, N. Y.	March 28, 1918	65
1879	Dwight, James	Mattapoisett	July 13, 1917	65
1893	Ermentrout, Sallie Justina	Eldridge, Col.	Nov. 14, 1917	60
1874	Farr, Edwin Lawson	Brookline	Jan. 24, 1918	72
1886	†Gibbs, Linnaeus Victor	Huntington	Oct. 17, 1917	76
1869	†Gifford, Benjamin Dodds	Chatham	May 16, 1918	72
1898	Goddard, Henry Edward	Brockton	May 12, 1918	65
1871	Gordon, John Alexander	Quincy	Jan. 24, 1918	74
1906	Hatch, Royal	Wellesley	Dec. 30, 1917	39
1862	†Holbrook, Silas Pinckney	Farnumsville	Oct. 2, 1917	79
1908	Howe, George Plummer	France	Sept. 28, 1917	39
1908	Jones, James Ambrose	Lynn	July 4, 1917	52
1883	Kenyon, Henry Jesse	Worcester	April 5, 1918	66
1895	†Kingsbury, Albert Dexter	Needham	Dec. 26, 1917	75
1876	†Lathrop, William Henry	Lowell	Dec. 22, 1917	77
1897	Martin, John Macleod	Roxbury	Feb. 19, 1918	62
1889	Mayberry, Edwin Nelson	South Weymouth	July 14, 1917	60
1904	McCormick, Thomas Joseph Henry	Roxbury	Oct. 10, 1917	42
1886	McIntyre, David	Dorchester	Sept. 2, 1917	59
1871	†Nickerson, William Jabez	New Bedford	March 6, 1918	73
1917	Osman, Charles Franklin	Dorchester	March 9, 1918	62
1867	†Parker, Moses Greeley	Lowell	Oct. 1, 1917	74
1898	Plummer, Frank Wentworth	Malden	Dec. 15, 1917	47
1865	†Presbrey, Silas Dean	Taunton	Oct. 23, 1917	79
1884	Sawin, Charles Dexter	Boston	Feb. 8, 1918	60
1882	Scribner, Ernest Varian	Worcester	June 14, 1918	63
1900	Sears, Stephen Hull	Yarmouthport	Nov. 25, 1917	63
1881	Sidney, Austin Wilbur	Fitchburg	June 25, 1917	93
1863	†Skinner, Edward Manning	Chestnut Hill	Feb. 8, 1918	82
1892	Stedman, Joseph Cyrus	Baltimore, Md.	June 14, 1918	51
1883	Stevens, William Caldwell	Worcester	Oct. 17, 1917	62
1872	†Torrey, Samuel William	Beverly	Jan. 1, 1918	74
1866	†Walker, Augustus Chapman	Cambridge	April 5, 1918	84
1908	Watson, John William	Brooklyn, N. Y.	June 23, 1917	46
1908	Weaver, Harry Vernon	New Bedford	Sept. 21, 1917	47
1900	Wells, Abner Toothaker	Waukesha, Wis.	Aug. 16, 1917	44
1884	Whitcombe, Charles Reed	Roslindale	March 9, 1918	64
1874	Williams, Charles Herbert	Cambridge	June 9, 1917	68

Total, 58 deaths.

† Retired Fellow.

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Chosen by the Council, June 18, 1918.

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On Membership and Finance.—C. M. Green, A. Coolidge, Jr., Samuel Crowell, F. W. Taylor, Alfred Worcester.

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J. B. Blake ..... Suffolk
G. H. A. Leahey ..... Middlesex North
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J. H. Ash ..... Norfolk South
J. A. Barré ..... Bristol South
A. L. Damon ..... Hampden
J. J. Egan ..... Essex South
E. N. Libby ..... Norfolk
M. D. Sheehan ..... Middlesex East
A. P. Lowell ..... Worcester North
H. G. Rockwell ..... Hampshire
W. H. Allen ..... Bristol North
E. S. Osborne ..... Barnstable
Charles Moline ..... Franklin
Vanderpoel Adriance ..... Berkshire

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- C. S. Chapin, Great Barrington.
- Henry Colt, Pittsfield.
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- R. W. Jackson, Fall River.
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D. N. Blakeley, Brookline.
A. N. Broughton, Jamaica Plain.
W. L. Burrage, Sec., Jamaica Plain.
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Samuel Crowell, Dorchester.
H. W. Dana, Brookline.
W. C. Emery, Dorchester.
H. C. Ernst, C., Jamaica Plain.
C. B. Faunce, Jamaica Plain.
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E. G. Best, Greenfield.
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J. P. McAdams, Lowell.
E. J. Clark, Lowell.
E. J. Welch, Lowell.
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F. G. Smith, Somerville.
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B. S. Blanchard, Brookline.
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C. N. Cutler, Chelsea.
W. C. Howe, Boston.
C. M. Smith, Boston.
Stephen Rushmore, Boston.

WORCESTER,
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W. C. Seelye, Worcester.
J. J. Cummings, Worcester.
Alexander McNeish, Leicester.
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W. F. Sawyer, Fitchburg.
G. P. Norton, Fitchburg.
H. R. Nye, Leominster.
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1918-1919.

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1918-1919.

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Miscellany.

RÉSUMÉ OF COMMUNICABLE DISEASES IN MASSACHUSETTS FOR MAY, 1918.

General Prevalence. During the month of May there were reported 14,899 cases of communicable disease, an increase of 3490 over the corresponding month for 1917, with a case rate per 100,000 population of 380 for May, 1918, as compared with 296.5 for May, 1917.

The increase was due in a large measure to the increased reporting of cases of measles and whooping cough.

Epidemic Cerebrospinal Meningitis occurred less frequently during May than the previous month, the number of cases for May being 35, as compared with 67 for the preceding month. These cases occurred chiefly in the more densely populated cities and towns, and the source of infection was, for the most part, unknown.

The desirability of lumbar puncture for diagnosis and the intraspinal injection of antimeningitis serum for all suitable cases is, of course, apparent.

Lobar Pneumonia was reported in 563 cases during the month of May.

Smallpox. There were but 3 cases of smallpox reported during the month. Two cases occurred in Boston, both probably infected from an unknown person in a lodging house. The third case occurred in Lynn, for which no source of infection could be found.

Scarlet Fever. A small outbreak occurred in the Western part of the State with a total of 46 cases. With commendable promptness, efficient isolation and quarantine was established, with the result that the outbreak was stopped in its incipiency.

In one town reporting 17 cases, the source was probably due to infected milk. A boy employed capping milk bottles worked with sore throat, headache and chills, and within the next week 16 cases occurred in families using milk from this source. The source of the boy's infection was unknown.

Measles. The total number of cases reported for the month reaches 6334. This figure speaks eloquently of the lack of efficient isolation of active cases, and the seeming neglect of contacts, who in many instances have no supervision until they come down with the infection. It might be suggested that a more careful supervision of all known contacts and the careful treatment of those affected be carried out.

Whooping Cough. As compared with the corresponding month of 1917, we find an increase of 646 cases, the total for May, 1917, being 355 and for May, 1918, 1001. Part of this increase may be accounted for by the better reporting by physicians, but that the incidence has increased there can be no doubt.

Venereal Diseases. Reports of venereal diseases begin to show the wide prevalence of these conditions throughout the State. With our reports admittedly incomplete, there have been reported 2651 cases of gonorrhea and 1141 cases of syphilis since February 1, 1918.

With these facts before us we feel that there is sufficient evidence to prove to the most skeptical person that the prevalence of gonorrhea

and syphilis is sufficient to warrant a strenuous endeavor to combat these diseases and the conditions which favor their occurrence.

RARE DISEASES.

Anterior Poliomyelitis was reported from Barre, 1; Boston, 1; Cambridge, 1; Framingham, 2; and Revere, 1; total, 6.

Dog Bite was reported from Barre, 3; and Boston, 3; total, 6.

Epidemic Cerebrospinal Meningitis was reported from Blackstone, 1; Boston, 8; Braintree, 1; Cambridge, 2; Camp Devens, 11; Fall River, 2; Fitchburg, 1; Lowell, 2; Lynn, 1; New Bedford, 1; Newburyport, 1; Newton, 1; Northbridge, 1; Pittsfield, 1; Quincy, 1; Revere, 1; Somerville, 1; Taunton, 1; Watertown, 1; West Springfield, 1; Winchendon, 1; and Worcester, 3; total, 35.

Malaria was reported from Boston, 2; and Lynn, 2; total, 4.

Pellagra was reported from Boston, 1; Chelsea, 1; and Foxboro, 1; total, 3.

Septic Sore Throat was reported from Boston, 5; Cambridge, 1; Chelsea, 1; Everett, 1; Framingham, 1; and Medford, 1; total, 10.

Smallpox was reported from Boston, 2; and Lynn, 1; total, 3.

Tetanus was reported from Lawrence, 1; Springfield, 1; and Taunton, 1; total, 3.

Trachoma was reported from Boston, 5; Cambridge, 1; Concord, 1; Lowell, 1; and Worcester, 1; total, 9.

Typhus Fever was reported from Chelsea, 1.

Correspondence.

THE PRACTICE OF MEDICINE IN AN ARMY BASE HOSPITAL.

Mr. Editor:—

I suppose any workman gets satisfaction out of the chance to do the best work he is capable of. I have felt, in my medical work here in France, as part of the group of physicians and surgeons associated together at Base Hospital No. 6, that the army organization made it possible for me to do better work and to give better service than has ever been possible for me before.

Modern diagnosis and treatment is far too complicated for any single man to know the whole of. When it is well done, when people's illnesses are searched to the bottom and treated with success, it is because a number of men, representing different specialties in medicine, work as a team, each contributing his part to the study of the patient's troubles and to the formulation of a plan of treatment. In civil practice at home this is seldom possible. In the first place, the patient cannot afford half a dozen high-priced specialists. In the second place, they cannot easily be brought together at frequent intervals to talk over the daily and hourly changes in the patient's condition.

But in a base hospital, like No. 6, where we have specialists in the diseases of the eye, of the ear, nose and throat, of the nervous system, of the skin, specialists in germ diseases, in troubles of the bones and joints, and in all the different branches of medicine and surgery, we can give our patients the benefit, not merely of one man's knowledge and skill, but of the combined brains and special experience of the whole group. One of the patients in our hospital recently needed to be seen by the specialists for diseases of the eye, diseases of the nose and throat, and diseases of the nervous system, by a specialist in brain surgery, and by an internist or general practitioner. This group, meeting as they did every day at meals, could talk over the changes in the patient's condition, the variations in his temperature, in his pain and in all his physical functions, and make plans for whatever surgical interference or other treatment was necessary, at just the right moment and without delay.

At home, the smooth working of such team work would have been interfered with by the private practice of each individual member of the group. They could not have met each other frequently. They could not have discussed the patient's troubles so frequently and freely.

It is a great relief to be free altogether from money considerations and professional rivalries, to be working wholly for the patient and not against each other, to have no thought of competition or of anything except doing a good job. Moreover, by constant association, a group of physicians learns to work together like the members of a football team, and to fit themselves quickly and skillfully each to each.

To practice medicine with a fully equipped laboratory, a first rate x-ray plant, a modern surgical operating theatre and equipment all ready at hand, where one can run in at any moment and get whatever is necessary; to have all our medical resources under one roof, and at one's fingers' ends, as it were, to have no distracting or conflicting claims, makes it possible for us to give a grade of medical and surgical service far higher than is possible in civil life. Being wholly new to military work, this has been a great and most delightful surprise to me. I am free now to give the best that I can. I have never been so before.

Another great advantage of our work here is in having a continuous force of well trained graduate nurses. In private practice at home one changes nurses very frequently and as a matter of necessity. In the hospital work of civil life one has to use pupil nurses with only incomplete training. But here, in the army, with a full staff of picked graduate nurses working together with each other, and with the same physicians continuously, the team work of which I just spoke in relation to the combination of physicians with each other, holds good also for the relation of doctors and nurses in their efforts to benefit the patient.

If the civil population at home could know what advantages the soldiers have here over anything that can be obtained in the way of medical treatment in civil life, they certainly would want their hospitals organized upon the military plan at home.

Richard C. Cabot, *Major, M.R.C.*

A PLEA FOR THE GENERAL ADOPTION OF A PLAN OF HOSPITAL ORGANIZATION THAT WILL RELEASE COMPETENT PHYSICIANS FOR ARMY SERVICE.

New York, June 27, 1918.

Mr. Editor:—

The United States is now in the war. The nation is getting its stride. The changes and readjustments that are required for the effective conduct of the war are difficult, and are becoming more difficult every day, but they are never impossible. Of necessity, the business of the country has been reorganized; the same imperious necessity calls for the reorganization of the civil hospitals.

Up to the present time, the enrollment of medical men has kept pace with the Army's growth. But a million Americans have now taken their place in the fighting line; ships are available for the rapid transportation of a second million; a third million is streaming into the training camps, and more doctors are needed. The hospitals of the country must help to furnish them—they can if they will.

By undertaking to retain in its service only the actual number of men required to care for its patients, the hospitals can at once release a large number of physicians for Army service. *Every hospital that has not already done so should at once place its staff on a war footing by abolishing the rotating service.*

What is the rotating service? It is a plan of organization which requires or permits two, three, four, or even six men, each serving six, four, three, or perhaps only two months annually, to hold down one man's job. There may be reasons of educational policy which justify a rotating service in ordinary times; today any such plan is contrary to the national interest and is self-condemned. In this crisis, no plan of organization is admissible which does not release every competent physician who can be spared for military duty. No man should be permitted to excuse himself from entering the Medical Reserve Corps on the plea that a hospital needs him unless his presence in that hospital is indispensable—not two, three or four months in the year, but all year.

For the period of the war the rotating service must go. The continuous plan is the only patriotic plan of hospital organization at this time. It is the duty of hospital authorities to adopt this plan now, and to make it plain to the men who are thus released from hospital service for the period of the war, that the purpose of their release is to make it easier for them to decide where the path of duty lies.

S. S. GOLDWATER, M.D.,
Chairman, War Service Committee, American Hospital Association.

AN AUTHOR'S CORRECTIONS.

Camp Greenleaf, Chickamaugua Park, Ga., June 20, 1918.

Mr. Editor:—

My attention has been called by the Surgeon-General's Office to several inaccurate and misleading statements made in the paper entitled "Roentgenology in the American Army," published in the JOURNAL of May 30, 1918, and it is my wish that the following corrections be published:

The statement that "Little preparation had been made for the use of x-ray in the Army" is inaccurate, as x-ray has been widely used throughout the Army.

Reference to a meeting of a committee called by the Council of National Defense is inaccurate, as the meeting was called by the then president of the American Roentgen Ray Society, after a conference with the Surgeon-General's Office.

The portable unit was developed by Dr. W. A. Coolidge in the early spring of 1917. The bedside unit was developed by Major J. S. Shearer, S.C., N.A.

Development of other apparatus was not made by the committee referred to above, but by officers appointed for that particular purpose by the Surgeon-General.

The stereo-fluoroscope is not "made use of in the wards," but is, as yet, not fully developed, as stated in another paragraph of the paper. It cannot be used with our present bedside unit.

The paragraph describing the "various medical components of a fighting force" is not entirely accurate when applied to the present methods of warfare.

Great credit is due the Surgeon-General's Office for the present efficiency of the x-ray service of the Army.

FRANK E. WHEATLEY, *First Lieut., M.R.C., U.S.A.*

THE CRIPPLED BEGGAR.

New York, June 26, 1918.

Mr. Editor:—

The public has too often confused the idea of a cripple with that of a beggar. The resulting reaction has done a great injury to the cause of the self-respecting disabled man in regarding him as a subject for charity but not for trade training and employment.

To be sure, there is historical precedent for this attitude, for in past decades and centuries various peoples have condemned the cripple to the status of roadside beggar or at best employed him as jester or court fool. And in our experience there is justification in the view, because we have seen many cripples at street corners, making public exhibition of their deformity or amputation and soliciting alms of the passers-by. The number of these beggars is small in comparison to the great body of physically handicapped men who are usefully employed, but the few have vigorously advertised, have made a considerable impression on the susceptibilities of the community, and have reaped a profitable harvest. A bank teller reported recently the case of a crippled street beggar who deposited in a savings account, after paying his living expenses, forty dollars weekly.

That the beggar cripple has been permitted to ply his trade is a great injustice to the disabled men of character and independence. The practice should have been stopped in the past; it is absolutely necessary that it be prohibited in the future. For with the expectation of our soldiers who will return disabled from the front, the public should have no excuse for associating their prospective career with that of the mendicant. On the contrary, every influence should be brought to bear upon the public to show that physical disability is an obstacle, but easily superable with character and ambition; and that the cripple may be made into a useful and productive citizen.

In several cities there have been inaugurated campaigns to drive the crippled beggar from the streets and give him the alternative of productive employment or a stay in jail. Such efforts should be imitated in every community and persevered in until the unfortunate conception of the cripple shall exist no more.

Such activity may well be undertaken as a first step in preparation for the return of our disabled soldiers and sailors.

DOUGLAS C. MCMURTRIE, *Director,*
Red Cross Institute for Crippled and Disabled Men.

SOCIETY NOTICE.

NEW YORK AND NEW ENGLAND ASSOCIATION OF RAILWAY SURGEONS.—The twenty-eighth annual session of the New York and New England Association of Railway Surgeons will be held at the Hotel McAlpin, New York City, on Oct. 21. A symposium will be presented on the "Modern Treatment of Infected Wounds."

DR. J. S. HILL, *President,*
Bellows Falls, Vt.,
GEO. CHAFFEE, *Cor. Sec.,*
Little Meadows, Pa.

MARRIAGE.

DR. LEON C. HAVENS, of Colorado Springs, has married Miss Mildred Kenniston, daughter of Mr. and Mrs. Fred A. Kenniston, of 2322 Massachusetts Avenue, North Cambridge. Dr. Havens received the degrees of A.B. and A.M. from Colorado College, and was graduated from the Harvard Medical School last spring. The bride was graduated from Cambridge Latin School in 1911, and from Vassar in 1915. Dr. and Mrs. Havens will make their home at Mineola, L. I., where the groom will be medical officer of the research laboratory, with the rank of lieutenant in the Medical Corps.